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Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Communications.

PURULENT OTITIS MEDIA.

A CLINICAL LECTURE EMBRACING THE FUNDAMENTAL THERAPEUTIC IDEAS AND CONSIDERATIONS OF A VERY SUCCESSFUL REMEDY.

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I presume every one recognizes heat and cleanliness as respectively the great destroyer of, and the most unfavorable condition for, the parasites of disease. Heat probably is the only certain destroyer of these organisms; but unfortunately it is therapeutically unavailable in suppurative ear troubles, which are now recognized as due to sehizonycetes developed from spores entering the ear either from the external meatus (chiefly) or the secretions of the naso-pharynx. The same sort of suppuration of the conjunctiva is controlled without any very protracted treatment, simply because all the conditions for cleanliness can be fulfilled. Becker, of Heidelberg, treats his cases of purulency of the conjunctiva by cleanliness alone; but most of the world is not so fortunately situated; hence the deficiencies of

cleanliness must be filled in with local remedies or adjuvants corresponding to the ideas of the surgeon. Every one knows that these "ideas" have ordinarily been translated into materia medica by "nitrate of silver" and "sulphate of zinc," or, to be a little more liberal in the translation, by *astringents and caustics.*

Until quite recently aural purulency had nitrate of silver as its most frequent opponent, and undoubted victories were scored by it, but chiefly in the hands of those who used it unsparingly. The history of the use and action of this remedy for both ocular and aural troubles is most instructive. Till very recently all theories in regard to its action I think must be looked upon very largely as platitudes, and in the present skeptical age a remedy so painful and uncertain would not stand the slightest chance of even the shadow of a trial supported by them. Men now-a-days are hardly to be induced to try a new remedy whose mode of action they can not satisfactorily explain; and yet every one has used nitrate of silver, and certainly no one can claim that he had any rational or satisfactory explanation of its action. Our experience with this remedy alone ought to teach us charity toward almost any remedy or plan of treatment reasonably recommended. *The use of nitrate of silver or other astringents and caustics never depended for a moment upon probably its sole recommendation, viz. its* (*their*) *parasiticidal action.*

Scientific aural therapeutics is wresting the department from the scorn of the laity, as well as that of the general profession; for with all our boasting we did not lack much of deserving the odium of the advice so universally given by the general practitioner for otorrheas, "let them alone, and they will be outgrown," or "keep the ear clean (*sic*) with a syringe." I am even not at all convinced that the claim attributed to a prominent English physician for a place in the nosological list for a "nitrate of silver facial paralysis of the aurists" was unwarranted.

Individuals, for both eye and ear cases, have met with "you do not use the remedies properly" from the specialist, embracing undoubtedly a goodly part of the truth, but not the whole of it.

Every one has taught that cleanliness is an indispensable

condition in the treatment of otorrhea; for without the removal of the secretion the remedies could not come in contact with the diseased parts. But the remedies have differed not only in character, but in strength as well; so the knowledge of what was *the proper way*, strength, or kind, was a riddle difficult to solve. The difficulty has been, we had no clear ideas of the nature of the trouble, and our therapeutics were correspondingly turbid, and we found fault because others could not see through them.

If we assume parasitic development as the foundation for this condition, as I think we are perhaps now justified in doing, it would seem hardly necessary to say more than that it must be gotten rid of, leaving details to each operation. He will certainly know that *violent measures are not the efficient ones.* Micro-organisms are not to be killed by grinding in a mortar. Again, the life and comfort of the patient are worthy of some consideration. Hence certain parasiticides are not available.

As already stated, *heat is the true parasiticide;* but it would scarcely be regarded safe or desirable to sear the parts in the ear with a red-hot iron. It has been practiced upon the cornea, and its use even extolled. So has carbolic acid, and good results reported. Strong, even saturated solutions of nitrate of silver have been used on the conjunctiva, and have been recommended for otorrhea; and if we know any thing about the matter, we know that, other things being equal, the stronger the solution the better, *since undoubtedly the basis of action is parasiticidal, and only strong solutions can have much of a basis.*

Assuming the parasitic growth underlying purulency in the ear and conjunctiva to be the same—and the assumption is not such a violent one—the remedy for results in the one locality will not necessarily produce the same in the other. For example: the yellow oxide of mercury, gr. x, in vaseline, ℥ j, as devised by myself—the remedy *par excellence* for all forms of conjunctival inflammation—is by no means such for inflammations of the mucous lining of the tympanic cavity. In certain cases not readily determinable it acts admirably; possibly in such as have a very patulous eustachian tube.

Another remedy, also acting marvelously well, and widely used for conjunctival troubles, is altogether the most valuable one for aural purulency, viz. boracic acid in the form of an impalpable powder—either Morson's or the ordinary crystalline form dissolved with alcohol and the alcohol allowed to evaporate. This remedy undoubtedly has a toxic effect upon the parasitic growths, directly and indirectly; and I do not know that I can do better than to advise you as general practitioners to confine yourselves for the present to its study and use. In the first place, it is perfectly bland, painless, and free from danger; hence can be used with impunity.

What now is the mode of procedure when you are in the presence of a simple purulent otitis media, or even one complicated with soft polypi, or a fungous condition of the edges of the perforation or mucous membrane, or even (and I think a condition specially demanding it) denudation of the bone? Bear in mind the first principle, *cleanliness*. It will be well for you, perhaps, to discard the syringe altogether. It is not necessary, really, from any standpoint, since no time is gained by its use; nor is it necessary for the removal of the discharge. In fact, unless skillfully used, I am convinced it does harm, and am not even persuaded of its harmlessness skillfully or unskillfully used; first, by the water being a great carrier of germs; second, by its being unpleasant or even painful to the patient; and third (but not least), because it is apt to engender in the user slipshodiness. Since omitting its use for the sake of clinical illustration, I have not used it either in dispensary or private practice for a long series of years. The probe and absorbent cotton answer every purpose; they effectually remove all the secretion, and carry in no promoters of it.

After the ear is thoroughly cleansed, use the balloon (or catheter) to inflate the middle ear, to dislodge, if possible, any secretion remaining in the middle ear, *always bearing in mind that a patulous eustachian tube is a favoring* (well nigh indispensable) *condition for recovery*. If, after repeating this process once or twice a day, and the discharge does not seem to diminish

(and in not a few fresh cases, especially in little children, even in adults, it will be found quite sufficient for a cure), you can begin with the boracic acid. The acid is gotten into the ear either by putting a small quantity into the speculum and blowing, and then packing it down with the cotton on the probe, or by gradually filling the meatus by putting in a small quantity at a time, packing it down with the probe. Often a single packing will last for days or weeks. When this is the case it becomes perfectly hard, and by the time it has crumbled and been removed by the ordinary cleansing of the ear the fundus will be found normal. So far as I have seen (and I have practiced it many times a day for two years and more), no inconvenience results from the plug of hardened acid, and I have had no occasion to dissolve it out. Possibly it is gradually brought out by the well-known surface movement of the epithelium, and gradually crumbles off. More frequently the acid is quite dissolved in the twenty-four hours, and the cleansing and packing process must be repeated, even day after day or week after week.

Again, saturated solutions freshly made will answer when the dry powder fails, as solutions will reach parts untouched by the powder, and may be used several times a day. Again, in case watery solutions fail, use saturated solutions of the acid and alcohol (absolute and of *full strength*), from the toxic power the latter has over these organisms, its rapidly evaporating quality leaving a deposit of the acid on parts not touched by the powder, and its hardening effect upon tissues by extracting the water.

Of course, moisture is one of the chief conditions of life of these growths.

Another process still remains—that of thoroughly saturating small pieces of absorbent cotton with a preparation of vaseline and the acid, half and half, and packing these one at a time firmly down in the bottom of the meatus, and leaving them there for days or weeks. It is wise, if you are unable to see your patients every day, to instruct them in the use of the cotton and probe, they measuring their success by not irritating the ear or producing pain.

While the plan I have marked out has its failures, I feel quite confident that the foundation is correct, and the lack of success will be found due to imperfection in its execution partly, and partly to the inefficiency of the adjuvant.

DISPENSARY MEDICAL COLLEGE OF OHIO, April, 1882.

FOREIGN CORRESPONDENCE.

My Dear Yandell: LONDON, Oct. 15, 1882.

The Jubilee Meeting of the British Medical Association. I have not discovered that any very new or original discoveries have been added to medical science at the recent meeting; but much useful work has been done in discussing subjects of interest, and from the results given by eminent surgeons from their own practical experience on the Listerian and other modes of surgical treatment. The inaugural address was given by the President, Dr. O. Strange; he fearlessly pointed out the besetting evils of the recent day, and spoke out plainly upon matters in which the honor and dignity of the profession are vitally concerned. The chief orator in medicine may be said to have been Dr. Wade; his address can by no means be described as an outburst of impassioned rhetoric, but rather as a sober and thoughtful address, dealing mainly with the leading principles, and the directions in which the various medical sciences are moving. Among other things he advocated the claims of rationalism in therapeutics as the aim of modern medical endeavor. He became eloquent in describing the great upheaval, some half a century ago, of old established dogmas, which up to that time had been considered as the gospel truths of medicine, and the new dawn of scientific research which began to shed its light upon the then existing chaos. No wonder the ancient practice of bloodletting for every disease and every abnormal condition of the body fell before the scientific assaults, supported by experiment, made upon it by Marshall Hall.

The event of the greatest interest to the surgeons assembled at Worcester was undeniably Professor Stokes's address. The honored name which he has inherited, and the reputation which he has won, demanded of the orator a contribution of no passing value to surgical literature. In substance, in form, and in delivery, the address attained the high standard of merit which was demanded. Professor Stokes made choice of anesthesia, antiseptic treatment, and osteogenesis as the three great advances in surgery during the last half century. He graciously complimented America upon the introduction of anesthesia into surgical practice, and made an eloquent appeal in behalf of greater freedom in physiological research, for the science of osteoplastic surgery had sprung naturally from experiments on living animals. The chief burden of the address was on the subject of aseptic surgery, and none who heard it could fail to be impressed with the orator's knowledge of the facts, his thorough conviction of the soundness of the doctrine, and the eloquence and earnestness with which he pleaded in its behalf. Strangely enough, only a few hours later, surgeons, among whom may be mentioned Mr. Lawson Tait, were attributing their success in abdominal surgery partly to their abandonment of all antiseptic measures, and were speaking of it as a cloak to careless surgery. What is the young surgeon to believe when some of his teachers state that their brilliant successes are entirely due to the use of Listerian antiseptic measures, and others equally eminent state that their successes are due to their discontinuing the use of such so-called antiseptic measures. As Milton says (the Milton who wrote poems and smoked a pipe in this island two centuries ago, not the skin doctor whose name appears in puffs of Pears's soap with those of Adeline Patti and Lily Langtry), "Who can decide when doctors disagree?" The Lancet says, Such discrepancies must arrest the attention of the intelligent observer; and assuming, as we do, that the facts stated are accurate, we must look for the explanation of the discrepancy in the mode of statement or in the deductions withdrawn therefrom. The position taken up by Mr. Lawson Tait is an extreme one.

He states that his brilliant results in ovariotomy are partly due to his discontinuance of so-called antiseptics. Although he at first thought that the adoption of Listerian surgery had greatly lessened his mortality, he now teaches that he was deceived, and that the improved results were due to other modifications which he introduced into his practice at the same time. We do not know what views Mr. Tait may hold on the origin of septic diseases; for ourselves we are content to accept the "germ-theory." On the one hand we have Professor Lister, Professor Stokes, and a whole array of other surgeons asserting that, just in proportion as they have employed efficient means of preventing the access and development of "germs" in wounds and discharges, have they been able to banish entirely all forms of septic disease from their practice, even under conditions in which such diseases have before been rampant. On the other hand we have Mr. Lawson Tait recommending the entire abolition of all antiseptic precautions. But he comes altogether too late to succeed in controverting Mr. Lister's doctrine and practice. The history of surgery shows conclusively that wounds treated without regard to asepsis are liable to putrefaction changes and septic complications. No amount of statistics such as Mr. Tait adduces can prove the negative. Their sole value is to prove that in that particular operation asepsis is secured by other means than antiseptic dressings. Nothing can ever upset the established fact that the antiseptic treatment of Mr. Lister, where thoroughly carried out, has reduced the mortality from septic diseases in a far greater degree than any or all improvements in wound-dressing that have ever been introduced. Where facts at first sight seem at variance, the scientific course is to see in what way they can be reconciled. Mr. Tait's facts support Mr. Lister's views rather than contradict them. He is an experienced and skillful operator, who leaves the parts in the best condition for healing, and disturbs them as little as possible. When the wound is entirely closed, the conditions for primary healing are satisfactorily secured, the cut surfaces are maintained in exact apposition, there are no foreign bodies in the wound, and

on the inner surface is a membrane in which plastic exudation occurs with remarkable rapidity. The wounded parts in the cavity within are then shut off from all outside contamination, tension from retained fluid does not occur, absorption rapidly ensues, and even if "germs" have been admitted during the operation they do not find a suitable nest for development if the fluid does not accumulate. In the cases that are drained, on the other hand, the fluid is allowed to escape as fast as it is secreted, there is never any cavity nor retained fluid, and thus again asepsis is secured. The real reading of Mr. Tait's figures would seem to be that he has learned from experience exactly when it is necessary to use a drainage-tube, and thus he avoids all retention of peritoneal secretion and all probability, or even possibility, of septic decomposition within the abdomen.

In his speech at the annual dinner, when proposing the toast of "Success to the British Medical Association," Sir James Paget dwelt largely on the scientific work of the association as being the most important of its functions, and the one in which the greatest advances had been made, and he evidently desired to convey the impression that, by a continued adherence to scientific investigations the association would be doing work which ultimately would prove of greater advantage than by pursuing its political functions at the expense of science. The same spirit pervaded some of the addresses delivered by the presidents of sections, notably Dr. Allbut (Medicine), Professor Humphrey (Anatomy), and Dr. Hughlings Jackson (Pathology).

The fifty-second meeting of the British Association for the Advancement of Science was opened on Wednesday, August 23d. The President for the year, Dr. Siemens, delivered an admirable and very interesting address, of which the main objects seemed to be greater expansiveness in science, and a more complete coöperation between the man of science and the man of practical skill. He observed: "It is to the man of science, who also gives attention to practical questions, and to the practitioner who devotes part of his time to the prosecution of strictly scientific investigations, that we owe the rapid progress of the

present day; and the two are merging more and more into one class as pioneers in the domain of nature." The career of Dr. Siemens himself is a very notable illustration of the value and productiveness for good of the combination he advocates. Dr. Siemens may be said to be the special representative of electricity, but his address showed that he by no means holds that electricity will supersede gas. "Gas will still," he thinks, "be the poor man's friend," even for lighting purposes, while a great future is probably before it as a fuel. A very able address was given by Dr. Arthur Gamgee, president of the Section of Biology, on the growth of our knowledge of the function of secretion.

While on the subject of the British Medical Association, I omitted to mention that the council have announced rules under which it is impossible for a Homeopath to become a member. The true disciples of Hahnemann in England at the present day could be counted on one's fingers. Even in the school of Homeopathy, homeopathy is not now taught. Many men, however, trade on the belief of non-medical persons who do believe in the teachings of Hahnemann. They would not even be owned by Hahnemann; they have departed from the fundamental principles of his faith and practice. Let them act candidly with the public and abandon a name which misleads it, and they will find no want of magnanimity on the part of the profession to which they return. The only way in which these false prophets can become members of the British Medical societies is by abandoning the title of homeopath, under which they trade.

The health of our troops employed in the Egyptian expedition appears to have been so far satisfactory. Cases of sunstroke have been frequent, but without causing a high percentage of deaths. The slighter cases of sickness are treated in the field-hospitals, the more serious are sent away to the base-hospitals, several of which are in buildings specially selected for the purpose. The water supply has, during the earlier portion of the operations, been of fair quality, although from the pres-

ence of chlorides cases of diarrhea have been rather numerous. Whether intentionally or as one of the ordinary instances of the state of war, the Sweet Water Canal has latterly been fouled by the corpses of Arabs, camels, and horses.

This is a very serious difficulty, and the danger of it can only be overcome to a partial extent by condensers and filters. Very heavy dews fall at night and are a considerable source of danger to the men on out-post duty, particularly after a long day's march under a burning sun. The encounter at Kassassin Lock is the most serious our troops have had as yet, and the death of Surgeon-major Shaw adds another to the long list of members of the "non-combatant" branch of the army who have lost their lives on the field of battle.

There is a letter in last week's Lancet, from the pen of T. Spencer Cobbold, M.D., F.R.S., on the subject of the Bilharzia Hematobia, the well known cause of endemic hematuria in Egypt. The learned professor of worms states that in slight attacks not more than a dozen or so of the parasite's eggs will be passed at each act of micturition, whereas in excessive invasions it is not uncommon for the patient to pass fifty or even one hundred dozen bilharzia eggs at a time. In severe cases the daily average of evacuated ova greatly exceeds this estimate. The severity of the symptoms and consequent dangers however are, as a rule, more dependent upon associated disorders than upon the actual number of parasites present. It reflects great credit upon our military authorities that they have grasped the subject and provided every soldier with a portable filter, which will remove from the water which our soldiers drink this insidious worm.

I am glad to see that a move in the right direction has at last been made here as regards street-ambulance arrangements. The usual method in vogue in London of bringing a patient to a hospital is to put him into one of these four-wheeled London street cabs, which have earned the cognomen of "Growler," whether from the usual unamiability of the driver or the springs I can not say. Now, however, an ambulance service has been

commenced, and ambulance carriages, the gifts of private individuals, have been placed on duty at some of the police stations.

The report of the select committee of the House of Commons on the working of the contagious-diseases act during 1881 has appeared. The first part of the report contains information concerning the gravity of the evils which syphilis causes. The committee then inquire into the effect of the acts in diminishing disease. They find that in the different stations at which the acts have been in force syphilis has been reduced in ratios varying from twenty-nine to forty-seven per cent, and gonorrhea by about five to seven per cent. Their general conclusion with regard to this part of the subject is this: that, out of 16.69 per thousand soldiers who would have been ordinarily incapacitated for duty, about one third or 5.38 are now in a state of health and efficiency through the direct operation of the acts. To this they add: "There ought to be added the gain to the service derived from the increasing immunity of the men from the various debilitating and incapacitating disorders, which, though not classed as venereal diseases, not unfrequently result therefrom." From a sanitary point of view, therefore, the acts have been in the highest degree beneficial.

That which in the present state of the public mind is the most important part of the report is that which relates to the objections taken to the acts upon social, moral, and constitutional grounds. The committee epitomize these as follows:

(1) That they involve the recognition and regulation of vice by the State, and are therefore an outrage upon public morality; (2) that they violate the first principles of constitutional law; (3) that in practice they tend to increase sexual vice, by creating an impression on the minds, both of soldiers and civilians, that it may be indulged in with impunity; (4) that they subject women to restraints and penalties from which men are free; (5) that under them virtuous and respectable women, at the instance, and even at the mere caprice of the police, may be, and, as a matter of fact, are brought before a magistrate, classed as prostitutes and subjected to a painful and degrading examina-

tion; (6) that they have increased what is called "clandestine prostitution."

The committee deal with these objections *seriatim*. With regard to the first, they point out that there is nothing new in this principle, and that, as far as the acts are concerned, it is simply a matter of degree. The State tolerates prostitution. The prostitute is punishable if she carries on her trade in an indecent and disorderly manner; but the habit of prostitution, pure and simple, is not a legal offense. The acts do not give prostitution more toleration than it enjoyed before their existence; all that they have done is to recommend that the toleration permitted shall be exercised with less detriment to the public health. An attempt is also made at the reclamation of the girls, for which moral and religious influences are brought to bear upon them.

With regard to the second objection the committee can find no argument which does not equally apply to vaccination and the isolation and treatment of persons suffering from infectious diseases. The woman of the town is only called upon to submit to measures which virtuous women often undergo voluntarily. Medical examination is not in itself a dishonor.

To the third objection, that the acts tend to encourage immorality by offering comparative safety to its indulgence, the committee reply that they do not think considerations of the consequences weigh much with men bent upon vicious courses, who are generally reckless and are simply dominated by their inclination to gratify a strong animal instinct. The rest are such very feeble objections that they hardly require an answer.

The committee then proceeded to consider the opposite side of the question. They think it substantiated by evidence that the acts have:

(1) Diminished prostitution in suspected districts; (2) almost entirely suppressed juvenile prostitution; (3) rescued fallen women from the frightful state of filth and disease in which they had previously lived; and (4) contributed to promote public order and decency in the districts in which they are

in force. Very strong arguments are adduced in support of all these heads.

With such evidence before them the committee could not do otherwise than advise against the proposed repeal of the acts. With regard to the further question—should the acts be extended? The committee, while admitting that every material argument points to an affirmative reply, refrain from giving it on the ground of the character of the opposition to the acts. The conscientious religious convictions of a considerable body of estimable people should, they think, be respected. They do not recommend any material changes in the acts as they stand, but merely some additional measures having for their object the more efficient attainment of the objects which it is sought to effect by them.

A medical report has appeared on the health of the men in the late Arctic expedition of the "Eira." Although twenty-five men sojourned for a period of fifteen months in the Arctic regions, there was no case of serious illness, and such as there was was in every case old disease which the men had suffered from before starting. When first they began to eat the walrus and bear flesh nearly every one had diarrhea, but after living on it for a fortnight every one had recovered and again became as regular with regard to the bowels as when they were enjoying their comforts at home. Small cuts and slight frostbites were common, but none of them of a serious character. The snow affected every one more or less, but there were no severe cases of snow blindness. There was one case of bronchitis, and one of pleurisy.

Washing was a luxury seldom indulged in during the winter, and a clean change of clothes once in three months was considered an extravagance, but no trace of vermin was seen.

My Dear Yandell: LONDON, November 1, 1882.

The medical year has commenced at the various medical schools, the students in embryo have assembled for the opening lecture of the session or introductory address. This is a great institution at many of the schools, and partakes rather of the character of a sermon. The patriarch of the hospital harangues the youthful aspirant to medical fame on the dignity and honor of the profession, and on the strait and narrow path by which it is to be reached. Certain hours of the day are allotted to attendance on lectures, others to practical work and private study, and again others to healthy exercise. The novice is solemnly warned of the evils that arise from association with bad companions, from the over-indulgence in tobacco and stimulants, and lastly of the various pit-falls that beset the path of a young man fresh from school when he discovers the liberty and freedom from control which accompany life in lodgings in a great city. All three moral precepts are copied in the daily papers for the edification of parents and guardians. What a model set of medical students we shall have; the Salvation Army, the Blue Ribbon Army, and the Young Men's Christian Association will fade into obscurity when the virtues of these new medicals become known.

Since the meeting, some few weeks ago, of the Social Science Congress, the subjects of the notification of infectious diseases and of the isolation of patients suffering from them have been fully discussed in all our journals. An official report, drawn up by Dr. Thorne and Mr. W. A. Power for the Local Government Board, on the use and influence of hospitals for infectious diseases has just appeared. The public in the neighborhood of these hospitals charge them with spreading contagion in their immediate neighborhood. This accusation was especially directed against two hospitals, the Fulham and the Hampstead smallpox hospitals; after lengthy legal proceedings the latter was closed in consequence of these attacks. Mr. Power has thoroughly investigated the case of the Fulham Smallpox Hospital. This

building occupies a site which, from a medical point of view, is singularly free from objection; for, with few exceptions, there are not within five hundred feet of the hospital grounds any inhabited dwellings. At the time when it was built the surrounding parishes were singularly free from the disease, which was, however, prevalent in the east end of London. Soon after the hospital was opened fifty-five acute cases were received from distant parishes. After this the disease broke out in the neighborhood. The same thing occurred afterward several times when there were a large number of acute cases in the hospital. Mr. Power, in his investigation, took several radii of a quarter of a mile, half a mile, and a mile and a half from the hospital. The nearer the hospital the larger was the proportion of cases of smallpox, and after a thorough house-to-house visitation and most searching investigation no cause could be discovered except the proximity of the hospital; also, the cases did not occur especially in the lines of traffic, but were distributed evenly over the area.

Having in view the distribution of cases and the circumstances connected with their appearance, he is driven to the conclusion that they must be due to atmospheric communication with the hospital. It may be argued that, until the same story can be proved of other smallpox hospitals, Mr. Power's conclusions must be accepted with reserve. The possibility of such error has, however, been guarded against by his investigations into the behavior of five separate epidemics, on each of which the occurrence of disease appeared to be governed by exactly the same laws. That he has dealt most fairly with his subject can not be denied—he himself expresses the reluctance with which he came to the conclusions which he has arrived at.

The question how the smallpox material of infection came to be disseminated through the atmosphere raises a fresh field for scientific inquiry, and it is to be hoped that it may throw some new light on the subject of zymotic diseases, the nature and mode of infection of which are at present but imperfectly understood.

A recent number of the Saturday Review remarks that it is astonishing how little suspicious even suspicious people are of the drugs which they take when they are ill. They are quite alive to the prevalence of adulteration in other trades, but will swallow medicines hastily brought from the nearest chemist's without so much as a thought as to the quality of the drugs. Adulteration in food may often be detected by taste, but in medicine this can not be done. Genuine drugs are often costly, and the substitution of others in their places is easy to perform, but difficult to detect. In no trade is adulteration so easy and profitable, but so disastrous in its effects, as in that of the druggist. Death, attributed to the virulence of disease, or want of skill on the part of the physician, may as a matter of fact be due to the worthlessness of the drugs. The physician orders the appropriate remedy, and wonders that it does not have the desired effect. But what was actually administered was not the remedy at all, but a counterfeit of it, and though the patient did not detect the difference, the disease did, and the patient died in consequence. How to procure pure and unadulterated drugs is one of the most difficult problems of modern medicine. In a large continental city there was till recently a large establishment devoted entirely to the manufacture of spurious drugs, their preparation giving evidence of consummate skill. Many specimens labeled "sulphate of quinine" are entirely destitute of any alkaloid derived from the cinchona bark.

A second edition, with much additional matter, has been brought out of Dr. W. E. Steavenson's work on Spasmodic Asthma. The author says: "Having suffered for years from the complaint myself, its nature, symptoms, and progress have always had a great interest for me, and I have seized every opportunity I have had of watching the disease; but I have never been altogether able to agree with the theories explanatory of the attacks usually given in the works on medicine, and my observation of the disease has borne out my already formed opinion of its nature." As to its origin and nature, the the author does not think the phenomena can be explained by

congestion of the bronchial tubes, nor that it is inordinate contraction of the smaller bronchi which produces asthma, but that it is rather a spasmodic contraction of the muscles of inspiration, by which "the movements of the chest appear to be arrested at the conclusion of one of the deepest inspirations, and spasmodically held in that position."

The real cause or causes which produce asthma have never been clearly made out. That which produces an attack in one patient is wholly inert in the case of another. But from observations of numerous cases several tolerably constant conditions have been found to exist. In the first place it is found that all cases depend upon an abnormal excitability of the vagus or of the respiratory center, but that that excitability is aroused in different individuals by different causes. Dr. Steavenson thinks the most common cause may some day be proved to exist in the electrical condition of the atmosphere. As regards treatment the author considers morphia as the best remedy. "Sedatives and antispasmodics I should consider the most serviceable drugs, and many of them have been used with beneficial results; but above all in value I should place the hypodermic injection of morphia. This has never failed to relieve an attack in myself, and I have never seen it fail in other patients. The objection to it is, that if often used the dose must be increased; but it is better to increase the dose of morphia than suffer the agonies of asthma and allow the organic changes in the constitution to take place."

Mr. William Adams, F.R.C.S., has brought out a second edition of his Lectures on the Pathology and Treatment of Lateral and other Forms of Curvature of the Spine. The author gives us very little new matter, with the exception of some additional observations on the treatment of lateral curvature of the spine by Sayre's plaster-of-paris jacket applied during suspension. He arranges lateral curvatures in three classes: (1) Physiological curves; (2) commencing structural curves; (3) confirmed structural curves. For cases of class 1, no mechanical treatment by any form of instruments or spinal supports should

be employed; reliance should be placed entirely on physiological means, such as gymnastic exercises, partial recumbency and attention to the general health; by these means actual curvature of the spine is prevented. Cases of class 2, "the only curable class of spinal curvature," are best treated by a combination of mechanical support, gymnastic exercises, partial recumbency, and attention to the general health. Cases of class 3 are to be treated in much the same way, "with the hope of preventing increase, and obtaining some improvement in the curvature during the patient's growth." It follows, therefore, that Mr. Adams holds that the plaster-of-paris jacket is not applicable to lateral curvatures. Its immobility is a disadvantage and inconvenience; its constant application tends to weaken the spinal muscles and hinders the benefit of gymnastic exercises, and it is an unnecessary restraint at night—moreover, the constant use of it interferes with cleanliness. The author recommends the poro-plastic jacket as "a good, efficient, light, retentive support in many cases of incurable spinal curvature." He recognizes to the full the value of Dr. Sayre's method of treatment in angular or antero-posterior curvature.

A curious case of so-called hermaphroditism, or, more correctly, doubtful sex through deformity of the generative organs, occurred the other day at the British Lying-in Hospital. A woman was delivered of a living child, which, upon examination, was found to present the following characters: a large penis or clitoris with a prepuce bound down by a strong frenum. Immediately below this a small canal, capable of admitting a large probe, from which urine is voided; a penis (?) of natural size for a new-born infant, and presenting at the the apex a well-marked depression, which resembles the external urinary meatus. The scrotum (?) is divided and resembles the female labia, but no trace of testicles can be discovered. So equivocal are the appearances that it is at present impossible to determine the sex of the child. Dr. Faucourt Barnes, whose patient the mother is, is inclined to the opinion that the type is feminine rather than masculine. If the child lives, it will in all probability be shown

to the members of the Obstetrical Society, when the problem of sex may possibly be solved.

At a recent meeting of the Pharmaceutical Conference Mr. George Brownen read a paper on the different actions of drugs when taken into the body at different periods of the digestive process. This gentleman has endeavored to ascertain to what extent the digestive ferments may be made available for the production of preparations of the various drugs. The question necessarily involved that of the extent to which their active principles suffered in this process. The constituents of rhubarb were found to be extracted with remarkable completeness, by treating an infusion first with an acid preparation of pepsin, and then, after neutralization, with an alkaline solution of pancreatine. The former extracted forty-seven per cent of the rhubarb, and the latter thirteen per cent more, leaving only a residue of cellulose and earthy salts. Infusion of calumba, prepared with boiling water and treated by a similar process of digestion, gave somewhat similar results; only spongy cellulose with a trace of berberia was left. Cinchona and opium, however, behaved differently; the gummy and extractive matters were dissolved and retained in solution, but a considerable quantity of the alkaloids was left behind. About half the cinchona and two thirds of the opium were dissolved. The cinchona tannin was destroyed in the process of digestion and failed to precipitate gelatine. The arabin of gum acacia remained apparently unaffected by the process, but a peptonizing change was wrought in some of the other constituents of gum. The acidulated extract of the gastric juice decomposed a watery solution of salicin very slowly and imperfectly, but the pancreatic ferment split up the salicin into saligenin and glucose. The experiments of Mr. Brownen do not go far, but they open out a new field which may yield results of considerable importance to physicians as well as pharmacists.

A good case of fat embolism is reported from Edinburgh. The patient, a temperate and healthy man of forty, was admitted into the infirmary with compound fracture of both bones of the

leg. The external opening was very small. The wound was dressed antiseptically, and the leg laid on a splint. At night there was considerable oozing, the wound was again dressed, and a compress applied. The next day, after an easy night, the pad was removed and the wound again dressed. In the afternoon of the same day the patient, after some conversation with the man in the next bed, ceased to speak; he was supposed to have fallen asleep, but it was soon noticed that some thing was amiss. His condition was as follows: Pulse 130, full and soft; respirations 24, regular and not stertorous; temperature 100° F. On auscultation a few crepitations were heard at the bases of the lungs; face somewhat dusky; lips pale; pupils contracted, and sluggish in response to light. He was unconscious, and peripheral stimulation was but slowly responded to. The patient yawned at intervals. During the night the respiration was occasionally of the sighing character described by Cheque Stokes. Throughout the following day the patient remained much in the condition just described, but towards night the respiration became markedly quickened; the pulse rose to 156 a minute, and the temperature to 104° F. His face was extremely dusky, and bathed in copious perspiration. The respiration was now over 60 a minute. The patient gradually sank, and died at midnight. After death the temperature rose to 105.8°. On post-mortem examination the following conditions were found: The pericardial sac contained half an ounce of blood-stained serum. The cardiac cavities were nearly empty. There were numbers of punctiform hemorrhages in the endocardium of the left ventricle. The lungs showed likewise numerous punctiform hemorrhages on their pleural aspects; they were slightly edematous, and congested at their bases. The pleural cavity contained a little blood-stained serum. Microscopically it was found that the whole of the small vessels of the lungs were filled with oil embola, some of them filling several branches of the vessels. The liver and spleen were normal. The medullary portions of the kidneys were congested, and many of the straight tubes contained some oily-looking deposit. Microscop-

ically the vasa recta were found to be plugged with large oil embola. In the afferent vessels of the glomeruli well-marked staining of the fat contained in them could be demonstrated with osmic acid, and in the vascular loops it could be similarly made out. It is to be regretted that a microscopic examination of the brain was not made, for the cerebral functions were clearly the first involved.

During the past week several somewhat eminent surgeons have died. Perhaps the one whose loss will be most felt by the profession was J. T. Clover, who for years has taken the lead in London as an administrator of anesthetics, and has also done much in the way of inventing and perfecting apparatus for their administration. His apparatus for administering gas and ether is now in use at nearly all the London hospitals. He also invented an exhausting-bottle and catheter for the removal of calculous debris in lithotrity, which was a great improvement on every thing that had gone before. Clover was present in the theater at University College Hospital during the first successful operation under ether in this country. The operation was a thigh amputation. Mr. Squire administered the ether; the patient inhaled it without a movement; Liston hurriedly removed the limb (in thirty seconds); and the ominous silence of the patient, so unusual in those days, caused anxiety for his life. Presently he awoke, and when the cloth was removed from his stump, and he saw that the leg was gone, the unbounded wonder and delight of the patient was scarcely greater than that of the spectators. The great surgeon was almost overcome with emotion as he grasped the full meaning of this new era in surgery, which had just opened with such a startling, unexpected, and complete success.

AMERICAN GYNECOLOGICAL SOCIETY.

The seventh annual meeting of the American Gynecological Society was held in Boston on the 20th, 21st, and 22d of September. The sessions were well attended, and were of more than usual interest. The presence of Mr. J. Knowsley Thornton, of London, one of the most distinguished of ovariotomists and one of the most genial of gentlemen, added to the interest of the occasion. Mr. Thornton not only participated in some of the discussions, but also read a valuable paper. Dr. M. D. Mann, of Buffalo, and Dr. W. H. Baker, of Boston, were elected members. The veteran ovariotomist, Dr. Gilman Kimball, of Lowell, Mass., was elected president. The other officers for the ensuing year are as follows: *Vice-Presidents*, Dr. Albert H. Smith, of Philadelphia, and Dr. Theophilus Parvin, of Indianapolis; *Council*, Drs. Byrne, of Brooklyn, Howard, of Baltimore, Jackson, of Chicago, and Campbell, of Augusta, Ga.; *Secretary*, Dr. Frank P. Foster, of New York; *Treasurer*, Dr. Paul F. Mundé, of New York.

It is not necessary to say that the hospitalities of the Boston profession were kind and generous; Boston is one of the most delightful places to visit, and one of the hardest to leave.

It will be seen, in observing the list of officers, that Dr. J. R. Chadwick, of Boston, is no longer secretary; Dr. C., who had more to do with the founding of the society than any one else, and who has labored so faithfully and successfully in bringing it to the present prosperous condition, declined serving any longer, and Dr. Foster, one of the most scholarly men in the profession, was wisely chosen his successor.

While, as previously said, the attendance was good, several gentlemen who were expected, and who would have added greatly to the interest of the occasion, failed to appear; for example, Sims did not come, and yet Boston is only a few hours from New York; Bozeman was not present, possibly he had no new sesquipedalian Greek words wherewith to batter medical

brains; Byford failed, yet surely none of his patients would drown in tears at his absence for a few days, nor would those days have brought him to poverty; Reeve and Lusk, though just home from Europe, did not make the shorter journey to Boston; Reamy did not come, but the mortality list of the American Paris probably was not so materially diminished by his staying at home that this was necessary; Goodman hides himself in Louisville, and does not let his light shine, as he ought to, upon the Atlantic coast. The next meeting of the society will be held in Philadelphia, and it is to be hoped that these and other absentees at the Boston meeting will not fail to be present.

We present, from the admirable report given by Dr. Carpenter in the New York Medical Record, abstracts of some of the papers read.

The first paper read was by Dr. Joseph Taber Johnson, of Washington, D. C., upon

The Proper Use of Ergot in Obstetrics. The author had nothing new to offer, but hoped to bring the knowledge already possessed into such shape as to show the powers of the drug for good and for harm, and to formulate a few safe rules for guidance in its administration to women in labor. With its other uses he did not deal. The author then referred to the different teachings concerning the use of the drug. With reference to its physiological action there was an agreement that it produced in a uterus already in labor a persistent tonic contraction which finally became tetanic in character, and that this kind of contraction was diametrically opposed to the intermittent rhythmical contractions of the normal parturient uterus. The danger of long-continued pressure of the head of the child upon the soft parts of the mother was then referred to, and also the liability of producing still-births by the use of the drug to overcome uterine inertia. He did not believe in its efficacy in cases of retained portions of the membranes, and thought that the labor of their extraction was very much increased by its use. He believed that the human race would be better off without than with ergot in the management of labor; certainly it should never be given to a primipara.

Dr. Parvin read a paper upon

The Care of the Perineum in the Second Stage of Labor. It had been shown by Duncan and Schroeder that in primiparæ some tearing of

the vulvo-vaginal orifice was inevitable, only thirty-nine per cent of women in their first labor, according to the latter, escaping rupture of the fourchette. Concerning the frequency of rupture, the statement that several hundred cases of labor had been attended without the occurrence of that accident could never be accepted, unless the person making it could also state that he had carefully examined the perineum in every case immediately after labor. The statistics of many obstetricians were then given, after which the author passed to the consideration of the causes, such as those relating to the pelvis, condition of the soft parts, etc. In order to reduce the accident to the minimum or prevent it, it was the duty of the accoucheur to hinder the abrupt expulsion of the head of the fetus, and permit gradual dilatation of the passages which it traverses. The various methods recommended for accomplishing this were then considered. When rupture was otherwise inevitable, it had been proposed to prevent the accident by incision or incisions; but episiotomy should not be resorted to unless it was indispensable. Dr. Parvin advocated immediate closure of the rupture, should it occur, and the use of horse-hair sutures, which certainly were readily obtained, and probably were quite as good as any other material that could be used.

He protested against bandaging the patient's knees together as a piece of unnecessary cruelty, for she can not by any probable separation of her lower limbs stretch parts that have just been so greatly stretched so that there will be the slightest strain upon the stitches; he was confident the bandage was unnecessary in the *immediate*, and he doubted the necessity in the *remote* operation.

The paper was discussed by Drs. A. H. Smith, J. R. Chadwick, W. T. Howard, Paul F. Mundé, and the discussion closed by Dr. Parvin, who in the course of his remarks said,

He did not believe in rejecting either the practice or the term *supporting* the perineum; with the hand properly applied to the perineum, the exit of the head can be retarded until dilatation permits it to escape without perineal tearing, and surely in this there is a support given the perineum which enables it to resist as long as necessary the expulsive force. Besides, such application of the hand strengthens a feeble part, throws the strain somewhat upon other parts of the vulvo-vaginal ring, and thus is a support to the perineum.

As to the introduction of two fingers in the rectum, and acting thus for the delivery of the head, I believe it endangers more than it protects the perineum, for the rectum is already pressed flat as a rib-

bon, and often a factitious desire to empty it is thus caused; now with the fingers stretch apart the closely applied anterior and posterior rectal walls, and my experience in the few cases in which the method was tried has shown me that voluntary efforts at expulsion are thereby excited or increased, and those bearing down efforts add to the danger of a perineal rent.

It has been suggested that in case the forceps is used the instrument should be removed before the head emerges. This is a recent practice, so far as this country is concerned at least; the great American masters of obstetrics did not so teach or so act; apart from the fact that the forceps furnishes one of the best of means for retarding the exit of the head, and for guiding it in the axis of the vulval orifice, at the very time the blades of the instrument are being removed a violent pain may drive the head out too soon, tearing the perineum, and the practitioner being otherwise occupied is powerless to prevent the mischief.

Dr. Fordyce Barker, of New York, read a paper on

Leucorrhea; its Constitutional Causes and Therapeutics. It seemed to the author of the paper that the fact that leucorrhea was not a distinct disease, but a symptom of many different and even opposite pathological conditions, had led to a neglect of its study, and practically to a forgetfulness of the fact that it not rarely originates from constitutional causes, and that when long continued it becomes itself a cause of local and important pathological changes. No writer during the last quarter of a century had considered it, except incidentally, as a symptom of some local disease, with the exception of Comty Stoltz and Robert Barnes, who had called attention to some of its constitutional causes. This was equally true of American, English, French, and German gynecologists.

For many years he was an entire disbeliever in the opinion of Tyler Smith, that leucorrhea was in many cases the primary cause of morbid states of the os and cervix; and while now he was not at all disposed to accept the statement that this is the fact in the majority of cases, in the last few years he had been convinced that it was true in some. While all accept the statement that local and constitutional causes continue to develop leucorrhea, yet he thought it might be questioned whether the latter be not too often disregarded in the present day, both in the diagnosis and treatment of this disorder.

Many of these constitutional causes, such as atmospheric changes, which induced general catarrhal affections, plethora in some, anemia

in others, all forms of defective nutrition and debility, etc., were well understood. The influence of nerve disturbance, as a consequence of defective nutrition, was perhaps not so generally appreciated, although most practitioners knew the fact that in some of their patients strong mental emotion was sure to bring on a troublesome leucorrhea. Dr. Barker then considered the bearing which certain anatomical facts, pointed out by Mayrhofer, had upon this disorder, namely, changes in the blood-vessels of the uterus produced by pregnancy. Leucorrhea and its attendant symptoms was not at all rare in young unmarried ladies, and every year he was consulted concerning it, chiefly by those who came to the city "to finish their education," as it is termed. The moral depression from home-sickness and exhaustion of nerve-power, exercised in unaccustomed directions, seemed to him to be the most common of the constitutional causes of these cases. He suspected the most frequent error in the treatment of these cases was found in a disregard of the necessity of such remedial agents as would secure a healthy performance of all the organic functions, a neglect of the *mor ale*, and a routine prescription of some preparation of iron, which, under these circumstances, was sure to destroy the appetite and produce headache, etc.

Leucorrhea in consequence of parturition, and in women who had passed the climacteric period, was then considered.

Mr. J. Knowsley Thornton, of London, read a paper upon

The Relative Value of Hysterectomy and of the Complete Removal of the Uterine Appendages for the Cure of Uterine Fibroids. Under the term "Hysterectomy" he included all cases in which the uterine cavity is laid open, more or less of its wall removed along with the fibroid. Whether one or both ovaries is removed is a matter of no consequence. He reserved the term "complete supravaginal hysterectomy" for cases in which the uterine appendages and vagina are removed, and it is therefore a combination of the two operations, which we consider as rivals to-day.

It was well known that yearly a very large number of women died from the direct or indirect effect produced by fibroid enlargement of the uterus. There were many also whose lives were constantly endangered, and many more whose lives were rendered so useless and their suffering made so severe that they were justified in taking the risks of having the operation performed.

The author of the paper considered solely those cases which could be best treated by abdominal section, if treated at all. The conclu-

sion reached, after the presentation of statistics of different operations, was, that surgical aid was justifiable, even necessary, in a certain number of cases, and yet there was the grievous mortality of somewhere between thirty and forty per cent after abdominal section, and a still higher rate of mortality when the uterine cavity was cut into or the supravaginal portion of the uterus was removed. Notwithstanding all the improvements, the operations of hysterectomy and complete supravaginal hysterectomy remained very formidable. But, thanks to American surgery, the brilliant conception of Blundell, in 1823, was made a recognized surgical procedure by Battey in 1874, and from the labors of others he was able to present a perfected operation, which would render hysterectomy still less formidable than it had been.

The complete removal of the uterine appendages, when efficiently performed, cured fibroid of the uterus with a rapidity and certainty that Blundell in his most sanguine moments never dreamed of. Mr. Thornton then gave statistics of the operation so far as he had been able to collect them, and showed that removal of the uterine appendages was attended by less immediate danger of life than any other operations for the removal of uterine fibroids. The reasons for performing the operation were made apparent in the brief histories of eight successful cases which were given, and the condition of the ovaries was also mentioned. The remaining portion of the paper was devoted to the consideration of the selection of cases, and the method of performing the operation, which must be done thoroughly—mere removal of the ovaries being useless, still less useful the removal of a portion of them—thorough strangulation of the tubes and ovaries at their bases, antiseptic precautions, etc.

The president, Dr. Thomas Addis Emmet, of New York, delivered his address, in which, after making fitting reference to the death of Dr. James P. White, of Buffalo, one of the founders of the society, he proceeded to speak on a special subject, namely,

A New Method of Exploration, with the Pathology and Treatment of Certain Lesions of the Female Urethra. The general practitioner has yet gained but little knowledge pertaining to diseases of the female urethra. In fact, it might be held that the subject had remained to this day in as much obscurity for the profession at large as existed regarding uterine disease some forty years ago, before the introduction of Sims's speculum. Individuals doubtless had attained dexterity in the use of certain instruments, and had been fairly successful in the treat-

ment; but the existence of a profound degree of ignorance had been the rule, and consequently much damage had resulted from the frequent confusion of cause and effect. We could scarcely credit the fact that the female bladder had been treated heroically for diseases when the cause of the irritation was due to a fissure in ano. He had known of several instances where, with a pertinacity worthy of a better cause, the bladder had been injected with solutions of nitrate of silver, week after week, until at length cystitis became established. Many, with himself, had treated without success a supposed diseased condition of the bladder or urethra, when the seat of irritation existed in an unsuspected inflammation about the folds of the utero-sacral ligaments. He had opened the bladder for supposed disease by making a vesico-vaginal fistula, and subjected the patient to months of inconvenience from the escape of urine, closed it, and re-opened it because of return of the symptoms, and finally found that the disease was urethral polypus, which the use of the endoscope in the hands of an expert had failed to discover. Regarding the various means which had been heretofore proposed for examining the female urethral tract as possessing but very little practical value, even in the hands of those most accustomed to their use, Dr. Emmet at once passed to the description of the new method of exploration, which formed the basis of his address.

It was some six years since he devised the plan of making a buttonhole-like opening in the female urethra for the purpose of making a diagnosis and also for facilitating any operative procedure. In the second edition of his book he had entered into the subject at considerable length, but during the last two years he had given it very careful study. The method described he regarded as the only one within our knowledge which fulfilled every indication; was safe, simple, and within the scope of any one possessing the least degree of surgical dexterity. It was as follows: Administer an anesthetic, place the patient upon the left side, and use a moderate sized Sims's speculum for bringing into full view the vaginal surface covering the urethral tract.

He had devised an instrument with which to make the opening into the urethra, but it had not been yet perfected to his satisfaction. It operated much on the plan of the ordinary scissors used for cutting button-holes. The operation could be readily performed by means of tenaculum, knife, and straight-pointed scissors, with a block-tin sound of size sufficient to place the tissues upon a moderate stretch within the urethra. The opening should be made in the median line, forward

to within one fourth of an inch of the meatus, and backward nearly to the neck of the bladder. The neck of the bladder should never be involved in the incision. The line along the vaginal surface should be nearly one third longer than the one through the urethral mucous membrane, and it was important that the chief difference should be at the end of the line from the neck of the bladder. If the opening was simply for exploration, it might be closed without delay, as in vesico-vaginal fistula. The advantages claimed for the method were that the whole of the canal could be fully exposed; that it was safe, and could be applied by any one possessing ordinary surgical dexterity; that, if properly performed, control over the urine will not in the slightest be impaired; that no difficulty has been experienced in closing the urethral opening afterward; and that no difference has been appreciated in the passage of the urine after the operation. It is not intended to supersede the formation of a vesico-vaginal fistula for the treatment of cystitis or removal of stone.

Dr. A. J. C. Skene, of Brooklyn, was unable to accept the president's unqualified condemnation of all other methods of exploring the female urethra, and took issue with several statements, believing that there was no disease which could be diagnosticated with more certainty than cystitis and diseases of the urethra, with one exception, and that was polypus or any neoplasm. Other than that, our means of diagnosticating urethral diseases were as accurate as those we now had for recognizing laceration or inflammation or fissures, as explained by Dr. Emmet.

Dr. Thomas read "notes of twenty-one cases of extra-uterine pregnancy;" his conclusions in regard to treatment were these:

1. If the diagnosis be well settled before the fourth month of gestation, he would destroy the life of the fetus by electricity in preference to all other methods.

2. Should the fourth month of gestation have passed, and surgical interference be called for, laparotomy or, with the tumor low down in the pelvis, elytrotomy should be preferred to electricity.

3. Should the pregnancy be abdominal, the practitioner might watch and wait until full term, and deliver by laparotomy or by elytrotomy and the forceps or manual delivery.

4. Should the full term be passed and the fetus be dead, wait and

watch, and aid nature when she demonstrates the outlet by which she desires extrusion to be effected. If bad symptoms under these circumstances at any time develop, perform laparotomy under strict antiseptic precautions.

5. Should rupture of the fetal nest have occurred before diagnosis has been fully made, wait to see whether nature is powerful enough to overcome shock, to control hemorrhage, and, further, if the patient is going to escape the dangers of peritonitis and septicemia. If these favorable results do not occur, if hemorrhage is about to destroy the patient immediately, or if septicemia attacks her later, laparotomy followed by antiseptic cleansing should be promptly adopted.

Immediately after the reading of this paper, Dr. Garrigues read one upon "Electricity in extra-uterine pregnancy;" his conclusions were as follows:

1. Experience has proved electricity to be an efficacious and safe agent to arrest extra-uterine pregnancy during the first three months, and perhaps after the pregnancy has in some cases advanced more or less in the fourth month.

2. It seems likely that the same agent may be profitably used at any period of fetal life.

Dr. Busey read a most interesting paper having the following title:

The Influence of High-heeled French Shoes upon the Female Form and upon the Relations of the Pelvic Organs. The first part of the paper was historical. This style was introduced under the regency. Under Louis XIV the heel was high and circular, but not oblique. During the reign of Louis XVI this objectionable style began to disappear, but has been again revived, and is perhaps more general now than at any previous time.

Age, pregnancy, and maternity were manifest and admitted agencies in the causation of deviation of the female form. Stature and the habits of posture and carriage were perhaps equally potential. Asymmetry, either connate or acquired, was the most common of physical defects. Paget has supplied the following description of a perfect female foot: "Great breadth and fullness of instep, a well-marked toe, a long second toe projecting a little beyond the great toe, and a very small, or, in some cases, almost suppressed little toe." From this point the author entered into a minute description, with illustrations, of the mechanical construction of the normal human foot, and then placed in

comparison the malformed foot as produced by wearing improperly shaped shoes.

The physical well being of the feet is a necessary and important part of the general sanitation of health. Pedestrian exercise is the great promoter and conservator of functional activity and constitutional vigor. To enjoy it, and to realize the benefit to the fullest extent, the feet must be healthy and the foot-tackle free and easy. Sore, contracted, and crippled feet, strained and stiffened joints, altered and displaced articulating surfaces, restrained mobility, and alteration of the line of gravitation (any one or all of which results may find their cause in too early and too constant use of high-heeled shoes) impede and augment the fatigue of locomotion, and make walking exercise painful. *Per contra*, they conduce to the acquirement of ungainly habits of carriage, to disproportion of the component parts of the body, and to a sedentary life with its manifold disturbances of the animal economy. The injuries, however, are not confined to the feet.

Dr. Busey then demonstrated the normal position of the uterus in the pelvis, and answered the question, "How are these relations of the natural conformation influenced by the excessive and constant elevation of the heels by the use of high-heeled shoes?" The answer involved the study of the natural curvatures of the body and the deflections consequent upon the primary deflection of the line of gravitation taking place at the base. It was easy to comprehend how the general health might be influenced by such functional and local disturbances; and when such conditions existed in women, where the nervous systems were always waiting for an opportunity to be troublesome, the pathological consequences might be serious.

Dr. T. M. Drysdale, the son-in-law of the late Dr. Atlee, and who has therefore had peculiar advantages for his special study of the ovarian corpuscle, and who in his many years of work has examined the fluid from more than two thousand abdominal tumors, read a paper upon

The Ovarian Corpuscle; its Origin and Characteristics. It was in reply to a paper read by Dr. H. J. Garrigues, of New York, at the last annual meeting.

Dr. Drysdale's views are, that the cell called the "ovarian granular cell" is almost invariably found in the fluid of ovarian cysts; that it is distinguished from other cells by its appearance and by its behavior

with acetic acid; that it has been so named to distinguish it from all other cells found in abdominal dropsical fluids, not meaning to assert that it may not be found in cysts in other parts of the body; that when found in this locality it is pathognomonic of ovarian disease; that it differs from any other known granular cell found in this abdominal cavity, and by means of reagents can be readily recognized.

On the other hand, Dr. Garrigues claims that the bodies found in ovarian fluids and known as Drysdale's corpuscles are not cells, but are only nuclei; that in appearance they are entirely like the pyoid bodies of Lebert, described as early as 1846, and can be found in various parts of the body; that in ovarian fluids these bodies were first described by John Hughes Bennett, in 1852; that they are not pathognomonic of ovarian nor any other cysts that may be found in various parts of the body. All these points were discussed at length.

The last paper read was by Dr. Van de Warker, of Syracuse; its title was,

The Mechanical Therapeutics of Versions and Flexions of the Uterus. The author united the historical part of the subject with a consideration of certain fixed principles which govern the constructive application, mechanically speaking, of instruments designed to correct versions and flexions of the uterus. The mechanical therapeutics of uterine displacements was yet unsettled. No department of gynecology was more interesting, and no department in general surgery had stimulated greater inventive activity. It was doubtful if in the entire range of gynecology a subject could be brought up which would elicit such hostile criticism upon one side and such hearty approval on the other, and for this there must be some reason. It was possible that this difference of opinion came from over-confidence in methods and instruments, as pessaries could no more be blindly relied upon than could a mere splint for a fractured limb. The instrument, in common with all others, required to be used with watchfulness, and such changes made in it as adapted it to the conditions which first demanded it and subsequently appeared in the course of its use.

Do pessaries accomplish what they were designed for? was the question Dr. Van de Warker asked, and its consideration from a purely mechanical standpoint constituted the basis of his paper. His opinion was that the uncertainty in the results obtained by the use of pessaries came (1) from expecting too much of the instrument, and (2) from selecting an imperfect agent for want of more clear ideas of the absolute limitations imposed upon the action of pessaries, and which must

govern the mechanical results to be expected. Two things must be clearly defined: 1. The limits imposed by the uterus and its appendages upon the mechanical agencies acting upon it; and 2. The action of the mechanical forces under these limitations. These limits, both in their mechanical and uterine relations, were fixed and absolute, and were not to be evaded by skill or ingenuity, and ought to be clearly understood. One was, however, reluctantly forced to conclude that the majority of pessaries were invented either in ignorance or defiance of these limits, and as if the only restriction upon their action was that of gravity.

The paper was illustrated by tracings made with the mercurial manometer, showing the movements of the uterus in respiration, forced respiration, coughing, speaking, walking, etc., and was also extensively illustrated with wood-cuts.

Reviews.

Bovine Tuberculosis in Man. An Account of the Pathology of Suspected Cases. By CHARLES CREIGHTON, M.D., M.A., Cantab., Demonstrator of Anatomy in the University of Cambridge. With illustrations. London: Macmillan & Co. 1881. Large 8vo. Pp. 119.

For some years several nations, the Germans especially, have given much consideration to tuberculosis in cattle. Accurate statistics of the number of cattle known to be tubercular are not attainable, but in the year 1877 2.16 per cent of the oxen and cows slaughtered in Augsburg were found to be thus diseased, and among the cows alone the percentage was 4.75.

Bovine tuberculosis has some peculiarities that distinguish it from human tuberculosis, and these have been sufficiently noted by eminent observers, including Virchow, to establish for it a character recognized by competent pathologists.

That bovine tuberculosis is communicable to other animals has been abundantly established by the experiments of Gerlach and Orth, who inoculated or fed goats, calves, lambs, pigs, and rabbits with the tissue or milk of tuberculous cows. In these animals the induced disease presented the special characteristics of the natural or inherited tuberculosis in bovine animals, and these characteristics pertain to the pathological histology of the abnormal formation.

Dr. Creighton unfolds all these facts after having stated that he had preserved certain specimens of morbid material secured from cadavers in Addenbrooke's Hospital, the patients having succumbed to tuberculosis, and submitted them to close microscopical inspection simply because their general appearance indicated that they would repay careful study.

There were eight of these cases occurring in February, March, April, and May, 1880, and it was in the study of them that he incidentally recognized the morphological arrangement peculiar to bovine tuberculosis, and in June he made public his conviction that these were all cases of bovine tuberculosis that had been communicated to the human victims by infection. The present work, prepared seven months later, embraces additional facts and arguments to sustain the verity of the position assumed by the author, and is an admirable specimen of scientific inquiry by an earnest and painstaking man seeking for truth in a field abounding with difficulties that require the searcher to be guided to his conclusions by the facts as he finds them without prejudice.

The author refers to the doctrine stated by Klebs in 1868 and advocated in recent writings by Cohnheim as well as by Klebs, wherein it is claimed that the virus of tuberculosis is a minute organism called by Klebs *Monas tuberculosum.* The author's view of the communication of the bovine tuberculosis to man precludes the idea that the infecting agent can be a minute organism; but while he states this position clearly, the facts upon which he rests his conclusion are not conspicuous. He makes bovine tuberculosis in man a separate variety of tuberculosis, quite distinct from other forms and recognizable by a specific morphology; but conceding this, it is difficult to see why such a morphology may not have its pathogenesis in an organic germ as readily as by an amorphous biological virus. Recent observers, notedly Koch, have made it morally certain that specific organic growths are almost constantly associated with human tuberculosis, that they probably bear the relation of cause to tubercular disease, and that they belong to the great family of bacteria. Of course this may be generally true and yet there appear in man a specific bovine tuberculosis, transmitted from animals to him, which has no association as either cause or effect with any parasite, animal or vegetable, but such a condition would be anomalous. However this may be the student of tubercular disease will find in Dr. Creighton's book a

concise, forcible, scientific presentation of his views on a fresh point in the crowded field of pathology coming to his notice as an incident in his critical observation of tubercular products as an exercise in the line of general study, and if humans are to have an additional measure of tuberculosis infected into them by their consumption of kine-flesh and milk, the superlative importance of the inquiry started by Dr. Creighton will be admitted on all hands.

The volume concludes with six plates containing seventeen figures, most successfully illustrating the leading points set forth in the text capable of being pictured, and the whole book is a fine specimen of the publisher's art.

J. F. H.

Diseases of the Rectum and Anus. By CHARLES B. KELSEY, M.D., Surgeon to St. Paul's Infirmary for Diseases of the Rectum; Consulting Surgeon for Diseases of the Rectum to the Harlem Hospital and Dispensary for Women and Children, etc., etc. New York: William Wood & Co. 1882. 8vo. Pp. 299.

Dr. Kelsey has prepared a superior manual on the diseases of the rectum and anus, which any one will appreciate who desires a book that treats concisely, yet perspicuously, of the subject to which it is devoted, giving all the essentials to a clear understanding of his theme as derived from a discreet review of the literature thereto pertaining up to mid-summer of the current year, and his own intelligent observation through years of special practice.

The first chapter contains a good presentation of the anatomy and physiology of the rectum and anus, and closes with an excellent review of the statements of others concerning the third sphincter, and announces his own conviction in these words: "From a study of the literature of this question, and from the results of dissections and experiments which we have personally been able to make, we are led to the following conclusions: 1. What has been so often and so differently described as a third

or superior sphincter ani muscle is in reality nothing more than a band of the circular muscular fibres of the rectum. 2. This band is not constant in situation or size, and may be found any where over an area of three inches in the upper part of the rectum. 3. The folds of mucous membrane (Houston's valves) which have been associated with these bands of muscular tissue stand in no necessary relation with them, being also inconstant and varying much in size and position in different persons. 4. There is nothing in the physiology of the act of defecation, as at present understood, or in fact of a certain amount of continence of feces after extirpation of the anus, which necessitates the existence of a superior sphincter. 5. When a fold of mucous membrane is found which contains muscular tissue, and is firm enough to act as a barrier to the descent of the feces, the arrangement may fairly be considered an abnormality, and is very apt to produce the usual signs of stricture."

Congenital malformations are discussed in the second chapter, and in the third are given some most excellent "general rules regarding examination, diagnosis, and operation" of diseases of the rectum and anus. Abscess and fistula are thoroughly handled. Certain fistulas may be cured without operation, but most of them should be subjected to one or another of several operative procedures described by the author, expressing decided preference for the knife, and next to this the elastic ligature. The chapter on hemorrhoids is also very complete in description and management of the disorder. Among other methods of treatment the author presents the modern one, by injection of carbolic acid, giving it deserved prominence, and stating that the injection is made with a common hypodermic syringe. This syringe will generally answer very well, but certain deep, internal piles will be reached with more facility and success with a special syringe devised by the irregular practitioner who originated this method of treatment.

The four varieties of prolapsus ani are fully presented, and malignant and non-malignant growths, ulcerations, and strictures occupy four chapters, and then a valuable chapter on impacted

feces and foreign bodies in the rectum. Touching impacted feces, the author calls attention to the important fact that "just as the practitioner has to learn that incontinence of urine may be a sign of a distended and not an empty bladder, so he may have to learn by a disagreeable error in diagnosis that a diarrhea is sometimes a result of an over-filled and obstructed rectum." The thirteenth chapter is a fine picture of pruritis ani with its multiple causes and diverse treatment, and the last chapter in the volume closes with a brief but well-matured article on rectal alimentation.

The volume is the August contribution, current year, to Wood's Library of Standard Medical Authors, and is printed and bound in the substantial style of the series. Fifty-two woodcuts illustrate the text, many of them in an admirable manner.

J. F. H.

Mental Pathology and Therapeutics. By W. GRIESINGER, M.D., Professor of Clinical Medicine and of Mental Science in the University of Berlin; Honorary Member of the Medico-Psychological Association; Member Etranger de la Société Medico-Psychologique de Paris, etc., etc. Translated from the German (second edition) by C. LOCKHART ROBERTSON, M.D., Cantab., Medical Superintendent of the Sussex Lunatic Asylum, Hayward's Heath, and JAMES RUTHERFORD, M.D., Edin. New York: William Wood & Co. 1882. Large 8vo. Pp. 375.

There would have been propriety and some enlightenment to the reader if the opening pages of this book contained the following publisher's notice: The original edition of this superb work was issued in German, from a Berlin press, in 1845, and about twenty years since the second edition, revised and enlarged by the author, was issued from the press of the same city. In 1865, the latter edition was translated into French and published in Paris, and in 1867, the New Sydenham Society had it translated into English, and published it as one of their reproductions of notable foreign books. We now present to the American

profession a reprint of the N. S. S. translation, without alteration or addition, and feel quite positive our readers will find it among the best of books of its kind at the date of its publication.

Had such a notice been found in the volume as a prefatory announcement, the service of the reviewer would be accomplished in saying that the American profession are greatly indebted to the publisher of this most excellent classical German work for reproducing it as a member of Wood's Library of Standard Medical Authors, thus placing it within reach of every one at the very moderate price of that series, and in the neat and condensed style of that publication.

Of course there is nothing fresh in the book, but it contains perhaps the very best delineation of the medical knowledge of mental pathology and therapeutics extant a quarter of a century ago.

J. F. H.

The Opium-Habit and Alcoholism. A Treatise on the Habits of Opium and its Compounds, Alcohol, Chloral Hydrate, Bromide Potassium, and Cannabis Indica, including their Therapeutical Indications; with Suggestions for Treating Various Painful Complications. By Dr. FRED. HEMAN HUBBARD. New York: A. S. Barnes & Co. 8vo. Pp. 154.

Not much consideration is given to alcoholism in this book, and, touching the opium-habit, the theory of the author is that the sudden, complete withdrawal of opium from a person addicted to its abuse produces a relaxation of the system that is liable to lead to sudden death through failure of the heart's action. His treatment, therefore, is to make two liquid preparations, one to consist of morphia, alcohol, tr. gentian co., tr. ginger, and water; the other of cannabis indica, glycerin, and alcohol. A dose of the first is given, and then an equal quantity of the second is added to the first, thus gradually reducing its morphia strength and, he maintains, supporting the system while withdrawing the opium.

Where the patient is the victim of neuralgia, rheumatism, or other disease for the relief of which opium has been taken until the habit has been established, the author modifies the treatment to cure the original disorder in conjunction with his measures to break up the opium-habit.

He writes quite confidently of the value of his plans, and asserts that the method of management he now promulgates is the result of his experience in treating between three hundred and four hundred cases in the last twelve years.

It may be said, however, that the book is not a satisfactory one. The author appears to be deficient in physiological knowledge, and his views of pathology are not altogether such as are held by the most accomplished pathologists of the day, while there is something of crudeness in a part of his prescriptions and not infrequently a lack of elegance and precision in his language, though as a rule his diction is free and forcible. Perhaps the shortcomings of the volume in more than one particular may be accounted for by the fact, stated by the author in an addendum to his introduction, wherein he advertises that he has been compelled by a growing general practice to prosecute his labor of writing between calls, allowing him but a limited time for the service. This statement may serve to indicate what the author esteems a sufficient self-justification, but it is not satisfactory to the profession. An author's readers are entitled to the best he can say or—to his silence.

The publishers in their imprint give no date to their work, the author is silent as to time every where, even in his reported cases, and there is nothing to indicate whether it is an ancient or a modern work except that the copyright was laid in 1881.

There is neither table of contents nor index, and of the thirty-five chapters in the volume more than half of them are without a heading. The book is therefore not in the best shape for ready reference.

J. F. H.

Home and Climatic Pulmonary Consumption on the Basis of Modern Doctrines. By J. HILGARD TYNDALE, M.D., Member of the New York County Medical Society; late Physician in Charge of Rocky Mountain Sanitarium for Consumptives, at Manitou, Colorado; author of "Present Status of the Pathology of Consumption and Tuberculosis," and of "Influence of Altitude on Consumptives." New York: Bermingham & Co. 1882. 8vo. Pp. 174.

While this volume is intended for the presentation of its author's views of the treatment of consumption, he very properly devotes the first division of it to the pathology of the disorder. And this is a specimen of his teaching on this point: "Pulmonary disturbance in the vulnerable manifests itself, so far as innervation is concerned, in irritability of the mucous membrane; so far as the vascular apparatus is concerned, not in active arterial determination, but in venous stagnation with a tendency to clogging up of the fine ramifications of the capillaries. The tissues inclosed within the river delta of a capillary net find themselves cut off from nutrition; hence their death by anemia, anemic necrosis. The products of this behavior of the vascular system may be properly said to be of the lowest forms of inflammation, and consist of weak connective tissue, inflammatory corpuscles, and preëxisting normal epithelial and connective tissue, now undergoing anemic necrosis. The first product differs from healthy connective tissue in its tendency to proliferate rapidly and imperfectly, and frequently as rapidly to break down; the sound corpuscles may undergo shrinkage and are then called cheese; the previously healthy tissue, cut off from the nutrient supply, makes an attempt to regain the juvenile condition but shrinks before accomplishing it (anemic necrosis), and is then known as tubercle."

This quotation will answer as an exponent of the author's lucidity of style, powers of description, scientific views of pathological changes, force of reasoning, and self-assurance.

The book has five divisions, the first, as already stated, devoted to the pathology of consumption, then follow, viz: Of

Treatment in General; Home Treatment; Climatic Treatment; and General Conclusions. These several divisions in their substance testify that the author is an extensive reader of consumption literature and has allowed loose rein and wide range to his thoughts in connection with his subject. But the book is a pretentious one, stilted, given to italics; it undoubtedly excites the most enthusiastic admiration of its author, but will prove quite unsatisfactory to the inquirer seeking exact and practical information touching either the general, home, or climatic treatment of consumption.

J. F. H.

A Manual of Organic Materia Medica. Being a Guide to Materia Medica of the Vegetable and Animal Kingdoms, for the Use of Students, Druggists, Pharmacists, and Physicians. By JOHN M. MAISCH, Phar. D., Professor of Materia Medica and Botany in the Philadelphia College of Pharmacy. With many illustrations on wood. Philadelphia: Henry C. Lea's Son & Co. 1882. 8vo. Pp. 459.

In his teaching Prof. Maisch has for many years felt the desirability of a suitable text-book which could be used in connection with his lectures, and he intended to prepare one, but divers things have conspired to delay "until it is now presented in a concise form, giving what may be called the *essential* physical, histological, and chemical characters of the organic drugs, so as to render the work also a useful and reliable guide to business."

The reader will expect to find whatever has been done by Prof. Maisch well done, and there will be no disappointment in this book; and the publishers, too, have turned out the volume in their usual excellent style. The work will therefore be found reliably accurate and trustworthy by those needing information in the line of its teaching, but it is not a book that the general practitioner will have much use for except it be to place in the hands of students.

J. F. H.

Practical Medical Anatomy. Guide to the Physician in the study of the relations of the Viscera to each other in health and disease, and in the diagnosis of the medical and surgical conditions of the anatomical structures of the head and trunk. By AMBROSE L. RANNEY, A.M., M.D., Adjunct Professor of Anatomy and late Lecturer on Genito-Urinary and Minor Surgery in the Medical Department of the City of New York, etc., etc. New York: William Wood & Co. 1882. 8vo. Pp. 339.

Prof. Ranney has divided his book into two parts: Part I is devoted to the head, and consists of four chapters, the first treating of the bones, the second of the facial expression in health and disease, the third of the blood-vessels, and the fourth of special regions of the head. Part II is concerning the trunk: the first chapter is descriptive of the spinal column, the second of the neck, third and fourth of the bones and the contained organs of the thorax, fifth of the pelvis, and the sixth of the abdomen. The volume is dotted with one hundred and fifty-six illustrations on wood, some of them good, some bad, some worse; thirty-eight pretty rough ones being used to illuminate the chapter on the face in health and disease.

The work is a queer medley of important and unimportant facts in anatomy, physiology, pathology and malformations, with hints and illustrations concerning the practice of medicine, surgery, and obstetrics. In his introduction the author, with pointed veracity, says, "If the term 'medical anatomy' be taken in its most restricted sense, the title of this work is a misnomer." It would be difficult to construct a title that would fairly characterize the contents of the book. Perhaps "a meandering medical miscellany" on an anatomical basis, is a title that would in an indefinite and comprehensive way circumscribe the limits of the book; and yet one point it contains would not be compassed, and this is set forth by the author in these words: "As this work is not intended to be a treatise upon descriptive anatomy, but rather a collection of hints which shall serve as a guide to the study of the *practical bearings* of the different portions of the head and trunk upon the field of general medicine, only such

points will be touched upon as seem to the author worthy of incorporation from a physiological, surgical, or medical point of view, or bearing in such a way upon the boundless field of comparative anatomy as to add to the interest of the reader in showing the object of the Creator in causing man to so deviate from the type of the lower animals."

Any thing that tends to show "the object of the Creator in causing man to so deviate from the type of the lower animals" is a step in teleology that should have special mention in the title of a book devoted to the harvesting and garnering of the ripened facts in the great field of medical science. The volume is a member of the series of Wood's Library of Standard Medical Authors, and the publisher's work is well done. J. F. H.

The Physicians' Visiting List for 1883. Thirty-second year of its publication. Lindsay & Blakiston.

This old and valued friend, convenience, and comforter, is again laid on our table, serving as a reminder that another year will be quickly upon us, that we should again provide ourselves with a list in which to record the daily work on which we all hope to enter.

Clinic of the Month.

PREPARATIONS OF ACONITE.—In an exhaustive article on this subject by that sterling pharmacist Dr. Squibb, in the Ephemeris of Pharmacy, etc., Dr. S. says:

In the use of aconitia for medical purposes it would seem to be essential that it should first be tested, and as this physiological test is simple and easy, and within the reach of all, it seems better adapted to general use than chemical testing, and two or three graduated pipettes will enable any one to apply the test. No aconitia should be accepted which will not give a distinct impression from $\frac{1}{800}$ of a grain or .08 milligram diluted to the measure of one fluid dram or 3.7 c. c. This is not too high a standard, for the reason that the aconitia of Duquesnel will give the impression from $\frac{1}{1000}$ of a grain or .065 milligram. The dose of such aconitia to begin with need not be smaller than $\frac{1}{100}$ of a grain or .65 milligram three times a day, given in solution diluted to four fluid drams or fifteen c. c., and always on an empty stomach. Should no effect be obtained within twenty-four hours, the intervals between the doses should be shortened, first, to four hours, then to three, before the dose is increased. If the commencing dose be $\frac{1}{200}$ of a grain, the first intervals should be shorter—say every three hours. The solution should be swallowed with as little contact with the mouth as practicable if the sensation there is to be avoided. But if used for trigeminal neuralgia, the mouth impression should certainly not be avoided, but should rather be sought for and be made as strong as possible.

For external use there is probably no form better or more convenient than an oleate of aconitia, made by dissolving two grains or one hundred and thirty milligrams in ninety-eight grains of oleic acid. A fluid ounce of oleic acid weighing four hundred and twelve grains requires 8.25 grains of aconitia to make a two-per-cent solution. Each minim of this oleate contains .0172 of a grain or about $\frac{1}{60}$ of a grain, and this quantity applied locally and repeated according to circumstances should be an efficient dosage, and should in a short time pro-

duce constitutional effects by its absorption. It should be applied to the surface by the cork of the vial, or by some non-absorbent, without friction, and about the head and face needs no covering; and great care must be taken that it does not get into the eye. In using it around the eyes this caution must never be forgotten. If applied under the clothing it should be covered with oiled silk or rubber tissue. Local neuralgias are much better reached by the dermic or epidermic method of treatment.

One hundred drops of the oleate make a fluid dram when dropped from an ordinary half-ounce vial, thus making a little more than 1.5 drops to the minim. One drop spread by a pin or by the cork of the vial will easily cover a square inch of surface without spreading much farther afterward, and in ordinary conditions of the healthy skin will be absorbed within a quarter of an hour, so that the dose may be repeated on the same place.

A well-made fluid extract of aconite root, made by repercolation with alcohol alone from good root, is the best and only preparation needed. It is accurate and uniform, and easy to manage accurately in dosage, and is relatively the strongest of all the known forms in which the drug can be used. For these and many other reasons it should take the place of all the other preparations, and perhaps also that of all the aconitias.

Each parcel of it, as bought by the pharmacist or the physician, should be tested; and if one tenth of a minim of it diluted with a fluid dram of water, and held in the mouth for one minute, does not give the aconite impression within ten minutes, the parcel should be rejected, or its strength should be obtained, and doses increased accordingly. That is, if double this quantity in the same dilution should be required to give the slight but distinct impression, then the dose should be doubled.

It is best used at the bedside in the following way: A household teaspoon is called for, and ten teaspoonfuls of water are measured with it into a wine-glass or small cup. Then ten minims of the fluid extract are added from a minim pipette, and the mixture is well stirred. A teaspoonful of this represents a minim of the fluid extract, if measured with the same spoon; and this dose, if not given oftener than every three hours, will about use up the mixture in the twenty-four hours, until the next visit, when a fresh mixture should be made and the dosage varied according to circumstances. The teaspoonful dose should be put in a wine-glass, and about two teaspoonfuls of water added before swallowing, to avoid too strong an impression upon the

fauces. A mouthful of water immediately after the dose is also useful in moderating the local impression.

The fluid extract may also be efficiently used externally by allowing successive drops to evaporate from any surface until the desired dose is reached, and then keeping the surface moist, that absorption may take place.

This fluid extract, when of good quality, is an exceedingly potent preparation, and so dangerous that extreme caution is needed, not only in its use, but also to prevent accidents and mistakes. In prescriptions the full title, "Fluid Extract of Aconite Root," should always be used.

FORCIBLE MOVEMENT IN THE TREATMENT OF STIFF JOINTS, AND THE METHOD OF PROCEDURE.—Wm. Adams, Esq., F.R.C.S., Surgeon to the Great Northern Hospital, London, says:

The practice of "forcible extension," as it is generally called, of joints which have become stiffened by inflammation has of late years developed into a recognized surgical procedure, with which we are now all familiar; but not many years since we only heard of the "bone-setter" forcibly breaking down stiff joints, and frequently obtaining motion, in cases in which surgeons had failed to restore the usefulness of the joint after subduing the inflammation. It is no doubt true that surgeons formerly thought that they had obtained the best possible result when, as they supposed, they cured the disease generally by rest, immobility, and counter-irritation, thus saving the amputating-knife then so freely used, and obtained a stiff joint and with a useful limb.

In a large number of these cases, however, the "bone-setter" found that by forcibly bending the joint he could break down inflammatory adhesions and restore useful motion to the joint. This success has for generations past formed the triumph of the "bone-setter's" art—a triumph which he generally magnified by assuring the patient that there was "a bone out," and that he had reduced the dislocation. However, there could be no doubt as to the result, and the patient obtained a useful limb with a movable joint—more frequently the knee-joint than any other—for which he felt deeply indebted to the "bone-setter," who, he believed, must have some power of discerning an injury which the surgeon had overlooked.

Side by side with this series of brilliant successes came another series of disastrous failures, often of the most serious kind—cases in which the forcible movement of the "bone-setter" was followed by

serious inflammation, more intractable than the original mischief, and in some instances leading to amputation—the very result which the surgeon prided himself upon avoiding. These failures, however, in no way damaged the reputation of the "bone-setter," who only failed after the surgeon had also failed, as he assured his credulous patient, either to cure the disease or reduce the newly-discovered dislocation.

The "bone-setter" of the present day, faithful to the traditions of the past, still continues the practice of so-called "forcible extension," and with the same result, viz. the admixture of a large number of unsuccessful with his successful cases. This, of course, is readily explained by the fact that the "bone-setter," having no medical education, has no power of selection. He is unable to distinguish cases of a constitutional from cases of a local origin; and whether the stiff joint may result from scrofulous or strumous disease, from rheumatism or from ordinary inflammation, or whether it may be the result of an accident in a healthy constitution, the same practice is therefore applied to all classes of cases, with the result above stated.

The method of procedure followed by the best results, and attended by the least risk of such accidents as have been known to occur when the more violent method generally recommended has been employed, is the following:

A considerable amount of force is used by some surgeons, and even machinery recommended, for the "breaking-down" of joints; but I believe where it is necessary to use so much force there can be very little hope of restoring permanently useful motion to the joints. It is difficult to believe that in such cases the articular cartilages can be in a sufficiently healthy condition for permanently useful motion. I have seen many failures—*i. e.* cases in which the joints have quickly restiffened and complete bony ankylosis resulted—and have never witnessed any good results which would justify the employment of such an amount of force.

The accidents which have been known to follow the employment of an extreme degree of force are numerous, such as fracture of the long bones, especially the femur and humerus; separation of the epiphyses; transverse fracture of the patella; laceration of the ligamentum patellæ; rupture of the popliteal vessels, necessitating amputation; laceration of the skin; and also laceration of all the superficial structures, so as completely to expose the interior of the knee-joint. Instead, therefore, of employing the more violent method, and attempting to obtain the full range of motion in a joint at one operation, I adopt the gradual method in all severe cases, using at the first opera-

tion only just sufficient force to obtain the least possible movement; and then at successive operations, repeated at intervals of from two to three weeks, tear through other adhesions and gradually increase the range of motion till the full extent is obtained. After each operation I apply hot-water dressing, generally using spongio piline, and to the leg always employ weight-extension. Absolute rest is essential, and when applicable the local vapor bath may be used two or three times a day. By this method I avoid the pain and inflammation which so frequently follow the more violent procedure.

In the simpler form of cases a simple operation will often suffice, but it is frequently necessary to repeat it three or four times. In the severer cases, however, more than this may be required: and in one of the most severe which I have ever undertaken, after suppurative inflammation, not of pyemic origin, but commencing below the knee and extending to the thigh, the knee-joint being secondarily involved, it was necessary to repeat the operation as many as eighteen times in the course of eighteen months. The success has been most complete, and nearly the full range of motion has been obtained, the free surface-play being now quite smooth, with the full amount of voluntary power.

Mr. Dacre Fox (Manchester) said that he had been for some time assistant to the late Mr. James Taylor, M.R.C.S., in Lancashire, who was the last holder of a so-called bone-setting practice two hundred years old, and he was convinced that a great amount of misconception existed among the profession as to what the character of such a practice was, and in what way such practitioners had achieved the success they had. The so-called bone-setting or freeing of stiff joints formed only a small part of it, as it principally consisted in the treatment of recent fractures, dislocations, and sprains; and it was by their manipulative and mechanical skill in the treatment of these injuries that such men had acquired their reputation. Much credit was often gained by bone-setters from lack of care in diagnosis and treatment on the part of general practitioners, as small but troublesome injuries were often overlooked or treated in a very perfunctory way. With regard to the freeing of stiff joints by those who could have no knowledge of the anatomy of a joint or the pathology of its diseased condition, there were certain external indications which had no doubt taught bone-setters to classify the cases upon which they dare venture to operate:

1. Joints that had become stiff from treatment after injury or from disuse, to avoid pain through moving a neighboring part. In these

the bony points were unusually prominent, the ligaments hard and rigid, and the limb exhibited considerable resiliency. These might be broken down with safety, and "suddenness" was desirable in the operation, as less likely to set up any subsequent inflammation than the gradual dragging on recently-formed adhesions.

2. Joints stiff from chronic disease. In these the outlines of the joints were much hidden, and they presented a more rounded, swollen appearance than was natural to them. Manipulative treatment in these cases was not desirable, as it was nearly sure to be followed by disastrous results; and if in any case more freedom of movement was obtained, it was of only a temporary character.

3. Joints stiff from old sprains. These were incomparably the most frequent, and those in which the bone-setters gained the greatest credit at the practitioner's expense, mostly from the want of active treatment on the part of the latter.

Mr. Fox, having dwelt at some length upon the pathology of a sprained joint, pointed out that in such an injury, after a time, the joint involved became partially stiff, was more or less swollen, and always exhibited one particularly painful spot, which indicated the seat of most injury to the ligament that had sustained the greatest resistance to luxation when the accident to the joint occurred. In these cases the adhesions should be broken down, the edema about the joints, and particularly in the tendon-grooves, dispersed, and firm, direct, constant pressure maintained over the ligaments and the tendons passing under them.

Mr. Fox said there was very much that might be "culled" with advantage from the practice of bone-setters, more particularly in their treatment of fractures by simple splints and well-devised pads in place of the many intricate mechanical appliances it seemed the fashion to invent.

THE ODOR OF IODOFORM.—To disguise the odor of iodoform the following is stated to be the best known combination:

℞ Pulv. iodoform., ... ʒ ss;
Ol. eucalypti, ... fl.ʒ ss;
Vaselin, ... ʒ iv.
M., fiat unguentum.

We do not remember to have seen any account of the oil having been used for this purpose by others. The ointment thus prepared is not without odor, but the odor is not that of iodoform. (N. Y. Med. Jour. and Obst. Rev.)

RECENT RESEARCHES ON TUBERCLES.—Dr. Robert Saundby, physician to the General Hospital, Birmingham, writes in Practitioner on this subject that there is good reason to blush at the manner in which Koch's experiments were served up to form the subject of leading articles in the daily papers; that a new era in the treatment of consumption should have been so loudly proclaimed, and that even our medical papers should teem with articles on the antiseptic treatment of consumption conceived in the same spirit of optimism.

The "antiseptic treatment" of consumption is certainly no novelty, but has been extensively and carefully carried out for some years.

Our memories must be very short if we have forgotten already the stir made in Germany three years ago by the statement of Rokitansky concerning the cures effected by means of the inhalation of a spray of sodium benzoate; or that Dr. Guttmann showed that such treatment, carefully carried out in thirty-one persons, failed to lower temperature, lessen night-sweats, affect the body weight, or relieve a single symptom in any one ease.

Variously modified means of applying antiseptic agents to the diseased pulmonary tissues have been devised by Dr. W. Roberts, Dr. Coghill, Dr. G. H. Mackenzie, and others, including myself. My own personal experience of the treatment has been very considerable, and while I am satisfied that it is a valuable and rational method for allaying cough, diminishing expectoration, and indirectly promoting the healing of the inflamed and ulcerated pulmonary tissues, I have seen nothing to lead me to modify my own views or to desire to modify the views generally held as to the gravity of the prognosis of pulmonary consumption. If analogy can be allowed to guide us at all in such a matter, the antiseptic treatment should precede the development of the signs of pulmonary phthisis, if we are to expect any advantage from it at all comparable to that which has made Mr. Lister's name famous in modern surgery.

The experience of antiseptic surgery, so far from encouraging

us to expect a like good result by the use of carbolic acid in consumption, should rather warn us to expect nothing. Surgeons have not found that carbolic acid is of any special service in the treatment of surgical tubercular diseases; cod-liver oil and sea air are still needed to promote the healing of wounds in strumous subjects; and finally, but by no means least in importance, antiseptics are known to be of small value when the wounded surfaces have been for some time exposed to the air, especially when they are deep-seated, irregular, and practically out of reach.

It is possible that further investigations may discover some means by which the tubercle bacillus may be readily destroyed, and I would suggest the importance of special inquiries in this direction. It may be that such means could be applied to the lungs in some more efficient way than is possible with carbolic acid. But while these are possibilities, the experience of the past warns us against indulging in too optimistic dreams of the therapeutic advantages to be derived from these discoveries. We do not possess a cure for relapsing fever or anthrax, nor has it been worth any one's while to announce that Eklund's discovery of the *bacillus lepræ* is the foreshadowing of knowledge mightier still, which shall cleanse the leprous skin, heal the ulcered limbs, restore the blighted features, and make the flesh again like the flesh of a little child. Such a consequence, wonderful as it would be, would not be more strange or more illogical than those which have been put forward as the probable results of Koch's researches on the tubercle bacillus, but we have not a large number of wealthy lepers in England, or no doubt we should have heard of it.

Puerperal Fever, its Treatment and Prevention.—Mr. John Lowe, after reporting, in the Edinburgh Medical Journal, several cases of puerperal fever, says:

> I am strongly of opinion that by early and repeated aseptic intra-uterine injections, a rapidly-acting cholagogue, washing out the bladder, if necessary, with some aseptic solution, and the timely and lib-

eral use of stimulants will avert death in many instances. It is no use giving the nurse instructions to wash out the uterus; we must do so ourselves by means of a long tube in the uterine cavity itself. Ammonia and brandy I regard as the medicines for the disease; indeed, when food is refused, brandy is not only most grateful to the patient, but is peculiarly well adapted to supply the place of ordinary food, and no amount of fever or other symptom contra-indicates stimulation when changes so destructive to the vital fluids and tissues of the body are in terribly rapid progress. To give aconite or veratrum viride in such cases is, in my opinion, as unscientific as it is useless; and yet these remedies have been vaunted and are actually used by men of undoubted ability and eminence. To get rid of a fermentative poison from the blood we must adopt some such practice as I have indicated, and not stop to theorize about the physics of the circulation. We must, in other words, support vitality and eradicate the poison. That salicylates and sulpho-carbolates taken internally do not rectify the turbid urine in puerperal fever I am convinced from experience, and I would strongly urge that all depressant remedies are both hurtful and dangerous. It would be a waste of time and space for me to speculate on the etiology of puerperal fever, still more to discuss the appropriate term for the disease. In the same run of cases we meet with malignant puerperal fever, puerperal septicemia, and pyemia. For my part, I believe that either may give rise to the other, and that scarlet fever or erysipelas may undoubtedly cause any of the above forms of puerperal mischief. This is my experience, and I have watched more cases under the care of others than those referred to in this paper.

I have now to call attention to what would appear to have received least attention: *how best to prevent contagion.* The golden rule hitherto has been to leave off attending confinements altogether for several weeks. This is generally a safe rule, but it is often a mighty inconvenient and, I believe, a most unnecessary one. It occurred to me that by the strictest asepticism the spread of the disease might be prevented. I remained as short a time as possible in the lying-in room when attending confinements, lubricated my hands well with vaseline and carbolic acid, and had the carbolic spray playing between the patient and me during operations. The labor over, I washed out the uterus and vagina with carbolic-acid solution in the same way. Now this proceeding has the advantage of cleanliness and safety, and is unobjectionable. From the moment I took these precautions there was not another case of puerperal fever in the practice, although I

continued to attend cases as they turned up, and I can not see how any one can fail to appreciate the efficacy of the treatment pursued. The inconvenience of the spray and its formidable appearance are not valid arguments against the practice. One additional puerperal case would be more inconvenient and more formidable. I will not pursue this subject further now, but merely give the foregoing remarks, made with much sincerity and earnestness, to the profession for consideration.

Bismuth in Dyspepsia of Children.—Dr. E. W. Dunbar writes in the Practitioner that loss of appetite in children, with pain after eating, nausea, and depression, if accompanied by a tongue either clean or slightly coated, but showing redness and enlargement of the papillæ fungiformes, is quickly relieved by administration of bismuth, either in the form of the subnitrate or of the solution of the oxide in ammonia and citric acid, as discovered and prepared by Mr. Schacht. The dyspepsia, which is characterized by the described appearance of the tongue, is produced by indigestible food. If the tongue is coated the dyspepsia is recent, and it is chronic and of some duration if the tongue is clean; loss of appetite and consequent diminution in the amount of food taken having given opportunity for the tongue to clean.

The digestion of children being easily disturbed, this form of dyspepsia may very frequently be observed among them. It is often necessary to persist in the use of bismuth for several weeks before the papillæ fungiformes resume their normal appearance and a lasting cure is effected, although improvement shows itself quickly in the appetite and returning liveliness and cheerfulness of the little patient. The action of the bowels is as a rule markedly improved and more regular, especially if the liquor bismuthi is used; exceptionally the bowels are rendered more constipated, and it is necessary to give a mild aperient occasionally.

While testing the accuracy of the described indication for the use of bismuth I prescribed it, owing to the state of the tongue, in the case of a child who had an obdurate cough that

had resisted all the usual remedies for subduing irritation of the larynx. The cough ceased with the improvement which quickly succeeded the dyspeptic symptoms. The dullness and languor produced by this form of dyspepsia in children may easily be mistaken, especially if the tongue is clean, for weakness and a condition requiring tonic treatment. The marked distaste for food and the characteristic tongue point to the true nature of the ailment.

The dose of liquid bismuth varies from two minims under one year to three, five, ten, fifteen, and twenty minims up to twelve years of age; the dose to be repeated twice or four times a day according to the severity of the symptoms. The remedy appears to be most effectual when taken after meals. The subnitrate may be given in doses of one half grain up to two, three, and five grains.

Bismuth is quite ineffectual in the dyspepsia of children where the tongue is smooth, clean, and shows no enlargement or redness of the papillæ fungiformes.

On "Bone-setting," Manipulation, etc. — Howard Marsh, Esq., F.R.C.S., concludes a recent paper on this subject in the British Medical Journal with the following propositions:

1. There are a large number of cases in which manipulation proves itself one of the most successful methods in the whole field of minor surgery.

2. It is an error to regard manipulative treatment as necessarily a process of violence. In the majority of suitable cases it can be carried out with such slight force that the chance of doing injury is extremely small.

3. It is chiefly useful in cases in which healthy joints have their movements restricted, and are rendered painful by some external agency such as, and very commonly, adhesions, or by rigidity of muscles, slipped tendons, and so forth. In the knee, however, internal arrangement must be carefully borne in mind.

4. We must remember how likely it is that adhesions will form after sprains, dislocations, and fractures, or after any injury leading to the exudation of lymph in the sheaths of tendons and other soft parts. We must prevent their formation as far as we can by gentle passive

movement of the joint shortly after injury where this is possible. We must not keep joints too long fixed by splints and bandages, and we must not dismiss patients till we are sure no adhesions or rigid muscles remain to impede movement.

5. Manipulation will seldom do good; it will generally do harm in cases in which joints have been seriously diseased. In cases of firm fibrous ankylosis it is quite unlikely to restore movement. It may, however, sometimes be employed to improve the position of the limb.

6. Joints that are fit for manipulation are those which after injury, or the slighter forms of inflammation, are habitually cool and free from considerable synovial swelling, or which look quite sound, or around which the tissues are brawny and the skin pale or indistinctly dusky, and in which movement within a limited range is free and smooth. Mere pain, if the joint be cool and there are no signs of serious disease, by no means forbids manipulation. On the contrary, it is a strong reason for using it.

7. A certain number of instances are met with in which no exact diagnosis can be made, but in which there is no evidence of structural disease, though the limb is stiff and disabled. In such cases, if manipulation be employed, an anesthetic being given, and the limb being carried in all directions through its normal range of movement, we shall not rarely effect a cure, which, however, we may not be able to explain. Some of these are examples of hysteria, some deep-seated adhesions, some slipped tendons, and some simple muscular rigidity.

8. It is advisable as a rule to use an anesthetic, not only to save the patient pain, but also, by relaxing the muscles, to bring the effort used to bear entirely on the source of abnormal resistance, whatever it may be. And during manipulation joints must always be fixed before they are extended.

9. We must often supplement manipulation with continued passive movements, douching, shampooing, etc.

10. Lastly, I will venture to refer to the importance of attending carefully to the minor affections about the joints. By being remiss in these cases we open the door to bone-setting, and are apt to commit oversights that we can not fail to regret.

DEATH FROM HEMORRHAGE—REVIVIFICATION.—Dr. Schwarz says death from bleeding has merely a mechanical cause, and describes his experiments of revivification on animals with a six-per-cent alkaline solution of chlorate of soda injected into the

veins of an animal about to die. He refers also to five successful cases in men, and gives the history of his sixth case. He makes the following remarks: Either the hydrate of soda is taken or a few drops of a solution of carbonate of potassa is added to the chlorate of soda. About five hundred cubic centimeters or more of a temperature of 39° C. are necessary for the injection—the median vein being preferable. Some air in the veins, if not too much, is not dangerous, as he has shown on animals, and Prof. Jurgensen on men. A great future is predicted for this method. (Translated from *Berlin. Klin. Wochensch.* for the AMERICAN PRACTITIONER.)

WRITER'S CRAMP.—Reynolds says that the prognosis in the writer's cramp, after many months, is extremely unfavorable. Mr. Wolff, of Frankfort-on-the-Main, publishes two hundred and seventy-seven cases, two hundred and forty-five of which are writer's cramp; one hundred and fifty-seven have been cured, some of fifteen years' standing; twenty-two improved; ninety-eight not improved. His method is an active and passive gymnastic exercise of the flexor and extensor muscles of the whole arm, and a centripetal massage of the same. At the same time he begins a peculiar and methodic writing exercise. His method requires much skill and experience. It is highly commended by Billroth, Esmarch, Wagner, Bardeleben, Bamberger, and others. Charcot, Vigouroux, and Dr. Schott claim priority in this form of treatment. In comparatively few cases is a central affection supposed to be the cause. (*Ibid.*)

SIPHON CATHETER IN RETENTION OF URINE.—Dr. Apolant related a case where the bladder was full to the navel. After introducing a catheter, No. 18, no urine flowed off except by pressure on the abdomen, and only by drops. After a second unsuccessful effort he made the catheter a kind of a siphon, and had complete success. (*Ibid.*)

Notes and Queries.

MARCHING POWER OF THE BRITISH TROOPS.—The great march from Cabul to Candahar had of course to be conducted without a base of operations or communications of any kind, through a hostile country, toward a definite point. The march commenced on August 9th. Ghazni, a distance of ninety-seven and one half miles, in which the Zamburak Pass (seven thousand feet) and the Sher-i-Daban Pass (nine thousand feet) were crossed, was reached on the 15th of August. For this part of the march, an average distance of thirteen and thirteen fourteenths miles was covered daily. The remaining distance of one hundred and thirty-four and one half miles was covered in eight days, or sixteen and thirteen sixteenths miles daily. Ten thousand one hundred and forty-eight troops, eight thousand one hundred and forty-three native followers, and eleven thousand two hundred and twenty-four animals, including cavalry horses, composed the column. The daily supplies for all these were drawn from the country after arrival in camp. Food was distributed and cooked with fuel (difficultly procurable and brought in from a distance) during the eight days' march from Ghazni to Khelat-i-Ghilzai. The longest marches on any one day were twenty miles, from Ghazni to Zerghalta, and twenty-one miles from Mukur to Panjak.

It may be interesting to refer here to some other marches recorded. Gen. Crawford marched his brigade to reinforce Sir A. Wellesley, at the battle of Talavera, in July, 1809, sixty-two miles in twenty-six hours, carrying arms, amunition, and pack—in all a weight of between fifty and sixty pounds per man. In the late Franco-German war, very long and difficult marches were performed by the Germans. Dr. Roth, who served as chief medi-

cal officer with the Saxon army, mentions that the 18th division marched, from October 29th to November 17th, two hundred and sixty English miles in nine days; nearly eighteen miles a day. While on December 16th and 17th, in the various maneuvers about Orleans, they marched fifty-four English miles. They were very heavily accoutred, and the roads were bad. A company of chasseurs of MacMahon's army, after being on grand guard, without shelter or fire, during a rainy night, started at three in the morning to rejoin its regiment in retreat after the battle of Weissenburg. The road was across the hills and along forest tracks which were very difficult for troops. The men marched part of the night of August 5th-6th, the day of the 6th, the night of the 6th-7th, and the day of the 7th till 8:30 P. M. The halts were eight minutes every hour, from 3:30 to 6, one hour in the night of the 6th-7th, and two and one half hours on the 7th; altogether, including the halts, the march lasted forty-one and one half hours, and the men must have been actually on their feet about thirty hours, in addition to the guard duty on the night before the march. The exact distance is not known, but, considering the extreme difficulty of that rugged mountain country and the bad weather, this is perhaps the most toilsome march on record. (British Med. Journal.)

Editor American Practitioner:

"In chirrosis," according to Beale, "the change commences in the hepatic cells, those near the circumference being first affected," etc. As a consequence of the altered condition of the cells, he thinks "the *attractive force inherent* in the organ which *determines* the flow of portal blood is lessened." The above is taken from Flint's Practice of Medicine, and the words in italics are the ones to which the writer wishes to direct attention. Has any one ever demonstrated that there is an attractive force pent up in the liver, which *coaxes*, as it were, the crude blood toward that organ, where it is rectified and sent on its way to renew, *mutatis mutandis*, the various parts of the body? The portal circulation, although more complicated than

the systemic circulation, is part and parcel of the circulatory circuit, and the former, in my opinion, is no more independent of the central organ of circulation (the heart) than the latter is. If there is an attractive force in the liver, there must be one in the kidneys, pancreas, spleen, and the glandular system generally, and what then becomes of the old established doctrine of *vis a tergo?* When the heart is first set in motion in the unborn fetus the same physical law is enforced as when an ordinary suction-pump is started. There is a vacuum somewhere, and the blood from the mother rushes in to take its place just as air rushes in to fill the lungs the moment the child is born. The doctrine of a vermicular action in the veins by which the blood is propelled outward toward the heart, I think is unphilosophical from the fact, that when the heart-beat is slow and labored stagnation of the blood takes place in the veins, as evidenced by cyanosis. The science of medicine is loaded with terms as vague as they are unsatisfactory, and if the phrase *vis a tergo* means any thing, it means atmospheric pressure. If Prof. Beale had said the force inherent in the heart which determines the flow of portal blood to the liver, he would have stated, in the writer's estimation, "the truth, the whole truth, and nothing but the truth."

WM. P. ORR, M.D.

ST. JOHNS, KY., October 24th.

EXCESSIVE MORTALITY OF CHILDREN IN SPAIN.—At the recent meeting of the Medical Congress of Seville Dr. Adame read an important paper on this subject, in discussing which Dr. Robert gave the following picture of life and how it is sapped in Spain:

His attention had been for long fixed on the fact that Spain presents the greatest national mortality according to statistics. In Oviedo the deaths are one hundred per thousand, the maximum in Madrid amounting to four hundred per thousand. There must be something special in our native land to account for a mortality so excessive. Two circumstances are the principal factors in the enormous death-rate of Spain—the want of the use of water and the poor alimentation. Our country is an educated land, but is far from being an enlightened land. It must be confessed that the Spaniards are afflicted with hydrophobia.

There are thousands and thousands who have never washed since they were born. May this not be one of the causes? On the other side, the races of our soil are frugal in general, but they abuse frugality. This is the country where they eat least. The field-laborer feeds himself merely with sunshine and bread. There are others referable to mortality. We wonder at the severity with which foreigners keep the Sabbath. On this day, with us, we work more or less irregularly, and on Sunday, instead of resting, if a current flows, it is certainly not to the fields, but to the *café*, the theaters, the taverns, and bull-fights, where no sun-influence is received, but, in exchange, others which it is well to pass hastily, nor indicate closely, as being known of all. From all these reasons the means indicated to diminish mortality are the following: 1. Corporal cleanliness, baths, ablutions, to maintain the suitable organic tonicity; 2. Augmenting the alimentation, improving it in quality, and making it economical; 3. Complete rest on festival days, and seeking recreation in the country; 4. Establishing public gymnasia every where, thereby resuscitating the Olympic Games.

Dr. Gutierrez said another cause still more important must be taken into account in relation to the mortality of the first year. This was the complete absence of hygiene as regards lactation. Mothers had no other rule for bringing up their children than capricious notions. They leave their offspring in the arms of the nurse, and the most accomplished send them away to be nursed, delivering them into mercenary hands. It must be agreed that the infants who die sink under a gastro-intestinal malady or symptomatic cerebral. It is well known that the intestinal mucous glands are not developed until a certain epoch of life, and till then the organization can not assimilate the nutrient principles that are ingested in the form of pap, etc. The mothers that submit their children to such ill-timed feeding are truly their executioners.

THE CALAMITY IN THE SEGUIN FAMILY.—On Wednesday morning the public were startled with the dreadful announcement that the lovely wife of Dr. E. C. Seguin, of this city, had, in a fit of temporary insanity, shot all of her little children, three in number, and afterward herself. She had taken them to an upper room, tied their hands behind their backs, and then, under the pretext of playing "blind man's buff," first killed the eldest, a beautiful boy of six years, then two sweet little girls, aged re-

spectively five and four years, and evidently in an instant afterward took her own life. When found in the evening, some time after the commission of the deed, all were dead. The lady was of a most lovable disposition, had been devoted to her husband and family, and had shown no symptoms of insanity except occasional attacks of melancholia, for which she could not account, and which she bravely endeavored to overcome. Her devoted husband, with an affectionate concern for her condition, had arranged to have her accompany him on a pleasure trip the next day, but he came home in the evening to find himself suddenly deprived of his entire family. A greater calamity could not befall any one; and coming thus upon Dr. Seguin, calls forth the deepest and most heartfelt sympathy of his many friends. May he have the strength to bear this terrible affliction. (Medical Record.)

THE N. Y. MEDICAL JOURNAL TO BE PUBLISHED WEEKLY.—We are told in the November number of our old and valued cotemporary that, beginning with the next volume, dating from the first Saturday in January, 1883, the New York Medical Journal will be published weekly instead of monthly. The editor says, "We have long felt that it was only a question of time when we should find ourselves obliged to take this step in order to give our readers the benefit of a great deal of matter which, it has seemed to us, ought to be laid before them, and that too promptly, but for which we have been unable to find space within our present limits." In its new form the Journal will have large double-columned pages, affording space for certain features that now seldom appear in it, while its present departments will be continued.

A NEW DISEASE.—A California physician who discovered a new disease—love madness—has been experimenting with the person afflicted therewith, and has produced the "love parasite" or bacillus micrococcus. This he cultivated up to the twentieth generation, and with the parasites of that generation he inoculated a number of subjects. The inoculation was invariably suc-

cessful, symptoms of the disease appearing a very short time after the operation. A bachelor, aged fifty, on the first day after the inoculation had his whiskers dyed, ordered a new suit of clothes and a set of false teeth, bought a top buggy, a bottle of hair restorer, a diamond ring, and a guitar, and began reading Byron's poems. The inoculation produced symptoms of the same nature in a young lady of forty-five. She spent five dollars at a drug store for cosmetics, bought a lot of new hair and a croquet set, sang "Empty is the Cradle," sent out invitations for a party, and complained that the Chico young men do not go into society. An inoculated youth of seventeen, employed in a country store, did up a gallon of molasses in a paper bag, and also, in a fit of absent mindedness, put the cat in the butter tub and threw some fresh butter out of the window. Finally he sat in a basket of eggs while looking at a photograph of a pretty girl, and was discharged for his carelessness. The Chico doctor is still experimenting, and will soon lay the results of his observations before the medical world. (Medical Record.)

THE LOUISVILLE MEDICAL NEWS. — Our genial and able neighbor has again changed editors. Prof. L. P. Yandell and Dr. McMurtry becoming the successors of Prof. Holland and Dr. Cottell. Dr. Yandell brings to the work considerable editorial experience gained when formerly associated in the conduct of the News with the late Dr. Cowling. Dr. McMurtry is already known as one of the coming writers among the younger generation of medical writers. The News, always able, should ever gain in strength while it will surely loose none of its good humor under its new management.

DR. J. J. WOODWARD, U. S. Army, has returned from Europe, and the profession will regret to learn that his health has not been improved by the trip.